

M3
EM
86/1
C.2 ✓

BOSTON PUBLIC LIBRARY
3 9999 06423 454 3



PROPERTY OF STATE OF MASSACHUSETTS

Boston Harbor Islands State Park 1986 Master Plan



REFERENCE COPY
ONLY
DO NOT REMOVE
FROM THE LIBRARY

Massachusetts Department of Environmental Management

PROPERTY OF STATE OF MASSACHUSETTS

Foreword

The Boston Harbor Islands belong to the citizens of the Commonwealth. They are a unique resource with the potential to serve as the eastern gateway to Massachusetts and as a showcase for our state's quality of life to residents and visitors alike. But they are now a "sleeping giant" waiting for their full potential to be tapped. This revised Master Plan for Boston Harbor Islands State Park provides us with the opportunity to create a vision for this resource and turn it into reality. I am proud to announce a new future for Boston Harbor Islands State Park that begins with the publication of this 1986 Master Plan.

There has never been a better time to embrace the potential of the Harbor Islands, for at long last we are rediscovering what Boston Harbor as a total resource means to Massachusetts and her people.

In the last 2 years alone,

- we have swept aside decades of inaction by creating the Massachusetts Water Resources Authority and beginning the cleanup of the Harbor's most important asset – its water;
- we have decided to construct a secondary treatment plant on Deer Island while relocating the Suffolk County House of Correction to the mainland;

- we have committed ourselves to a revival of water transportation encompassing recreational, commercial, and airport travel as well as commuting to work;
- we have moved closer to a network of Harbor gateways by opening the Lynn Heritage State Park, beginning major improvements at Long Wharf in Boston and Hewitt's Cove in Hingham, and planning new waterfront parks in East Boston and Dorchester;
- we have launched a new era of growth in the Port of Boston, from the shipping terminals to a nearly completed renovation of the fish pier to the opening of a new cruise ship facility;
- we have created a harbor planning process which guarantees that water transportation, public access, and vital port activities will be fully accommodated in waterfront development.

Like any Master Plan, this one is intended to be strategic and conceptual, and many of the details it presents for individual sites are illustrative rather than definitive. But the nature and magnitude of the opportunity is here for all to see. Two hundred thousand people visited the Islands this year – and if we can provide the first-class park system presented in this Plan, that number can and will grow to over half a million in the years to come.

Those people will come from all parts of our Commonwealth and beyond. Tourists drawn to the timeless beauty of our Harbor will join families from our own metropolitan neighborhoods for whom the Harbor Islands are becoming accessible at last.

This was the opportunity that I and others envisioned in 1970, when the Legislature created the Boston Harbor Islands State Park, and in 1976, when my first Administration began its actual development.

This Plan tells what state government can do to realize the dream of the Islands. But it also challenges the private sector to play its role. If the business community can join with public interest groups like The Boston Harbor Associates, the Friends of the Harbor Islands, the Boston Educational Marine Exchange, and Save the Harbor/Save the Bay, the Islands will enjoy the resources, the visibility, and the event sponsorship they need to achieve their full potential.

I congratulate the Executive Office of Environmental Affairs, the Department of Environmental Management, and the Metropolitan District Commission for their dedicated stewardship of the Islands, and I applaud Wallace, Floyd, Associates for their work in preparing this Plan.



Michael S. Dukakis
Governor

PROPERTY OF . . .



Nantasket Roads and Hull from Georges Island

“With a possible exception in Venice, it is believed that the people of no other city in the world make as much or as good use of their harbor, otherwise than commercially, as those of Boston have been long accustomed to do, and that none take as much or as justifiable pride in the character of their small craft, and their dexterity in handling them.”

—Frederick Law Olmsted

The Boston Harbor Islands State Park was created through the efforts of the Department of Environmental Management (DEM) and the Metropolitan District Commission (MDC), beginning in the 1950s. Through their efforts, citizen support in the 1960s, and action by the Massachusetts Legislature in 1970, most of the Harbor Islands are now part of the Park.

Since 1972, when the first comprehensive Plan for the Park appeared, many improvements have been made, including clean-up, seawall repair, new piers, trail improvements, water taxi service, and staffing by a trained group of managers who live on each island.

This first phase of Park development has turned around decades of neglect and made the Islands accessible as a unique experience in the Boston area.

Now, the original plan for the Boston Harbor Islands State Park has been updated to guide the next ten years of improvements. The Islands themselves are the basis of the Plan. Concepts for each island are based on their individual assets and liabilities, and the Plan as a whole is organized around four interrelated themes – natural forces; Harbor geography; Harbor history; and Harbor transportation – that give coherence to the Boston Harbor Islands State Park as a whole.

When the Plan for the Boston Harbor Islands State Park is fully implemented, total visitation is expected to have increased from the present 200,000 per year to 600,000 or more. However, this dramatic increase will not be evenly spread over the Islands.



Georges Island

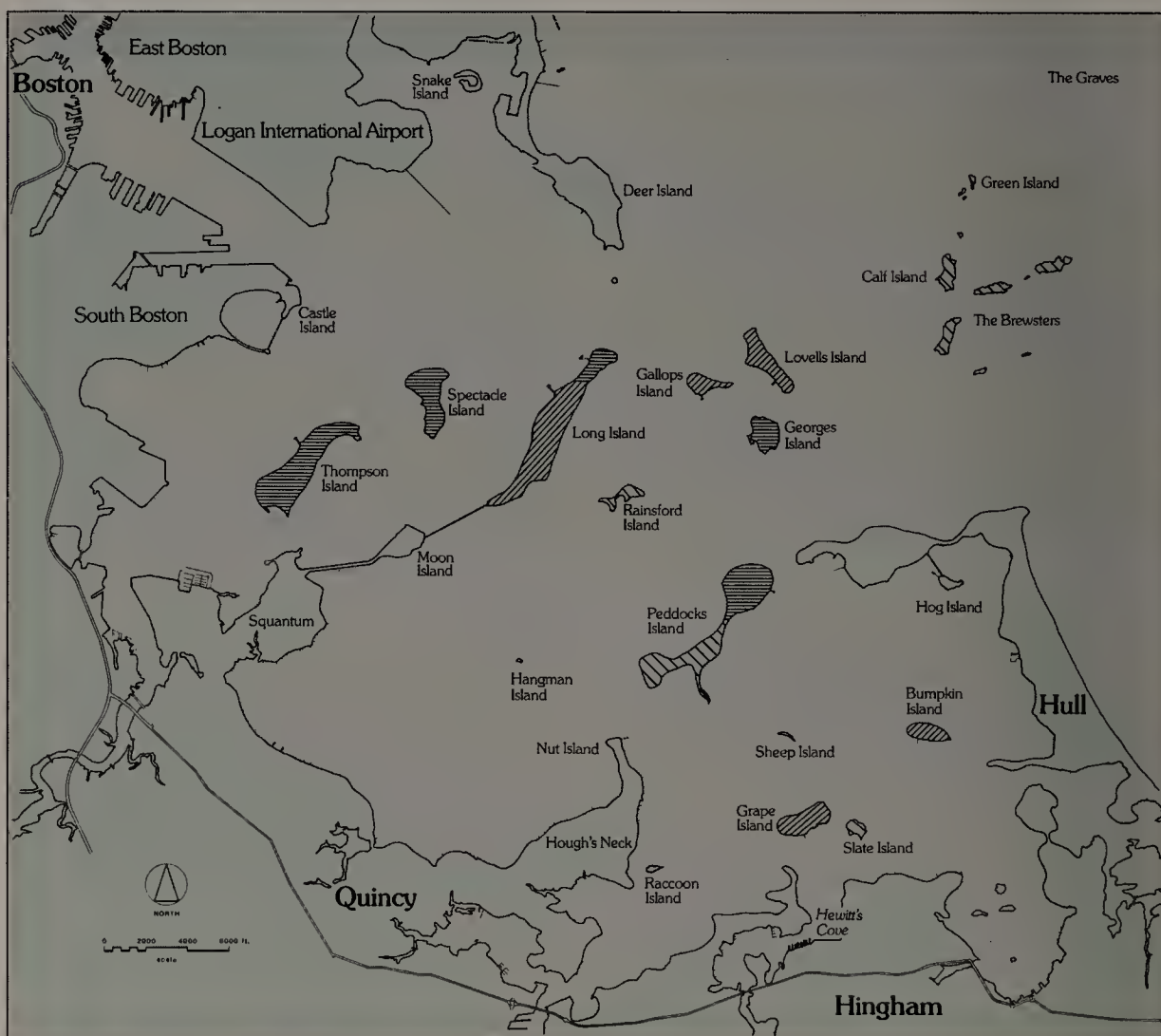
Most visitors on a typical summer weekend day will be found at four major centers of recreational and interpretive facilities located on Georges, Long, Peddocks, and Spectacle Islands, and it is on these islands that most Park development will occur. Each of these intensive use islands will be served by separately scheduled ferries from Long and Rows Wharf in Boston, Hewitts Cove in Hingham, Lynn, and Hull. The four islands will be connected by a large water taxi travelling a circuit among them.

A second group of islands will continue to be used at moderate intensity: Bumpkin, Gallops, Grape, the southern half of Long, and Lovells. These islands will be

served by water taxis based at Georges, Long Head, Peddocks Islands, and Hewitts Cove, providing convenient service with schedules that limit use of each island to levels appropriate to island maintenance and visitor enjoyment.

Development on these islands will be smaller in scale, consisting of improvements to provide interpretive facilities, visitor comforts, and improvement and management of historic and natural resources and trails.

A third group of islands will remain at low levels of visitation: the Brewster group, Rainsford, and Slate. Natural habitat will be actively managed, but little or no development will occur here.



Future Use Levels

- High
- Medium
- Low

Highlights of the Plan

1986-1988

Extend the visitor season into the Spring and Fall.

Improve **Long Wharf** docking facilities and plan Boston Harbor Islands State Park Visitor Center at the head of the Wharf.

Make safety and visitor center improvements at **Georges Island** and begin restoration.

Improve and plan major facilities at **Long Island**, with direct ferry service.

Develop **marketing strategy** and action plan to attract and serve urban residents.

Perform a scientific study of natural areas in the Harbor and design a long-term program for **habitat improvements** in low use areas to support plants and wildlife as they might have existed there before the 17th century.

Provide a prototype floating management base off **Gallops Island**.

Increase the number of **island managers** on all staffed islands.

Begin stabilization of **Spectacle Island**.

1989-1992

Provide minor improvements to **Bumpkin**, and **Lovells Islands**, with improved water taxi service.

Restore Fort Warren on **Georges Island**.

Construct an additional pier and visitor/commuter facilities at **Hewitts Cove** headquarters, and provide direct water taxi to **Bumpkin**, **Grape**, and **Pedlocks Islands**.

Begin park development of **Spectacle Island**.

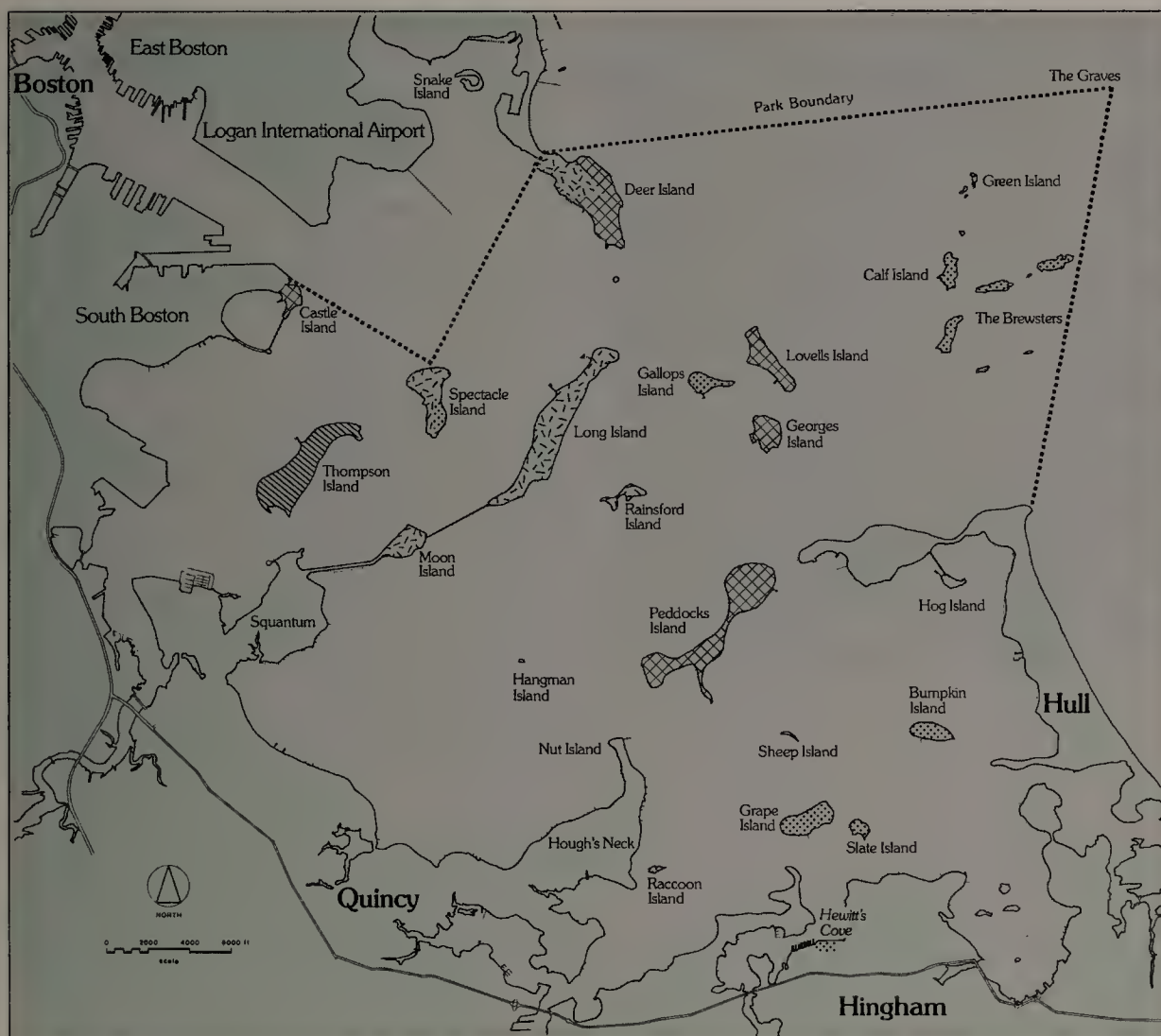
1993-1994

Open **Spectacle Island** as a fourth major activity area.

Provide **expanded ferry and water taxi** system, serving all active islands.

Complete development projects; continue habitat improvements, restoration and management initiatives.

Study, plan, and develop **swimming beaches** as Harbor water quality improves.



Ownership

- DEM
- MDC
- Boston
- Private



Long Wharf, site of the first major improvement

Introduction

The Boston Harbor Islands are a unique natural, historical, and recreational resource of the Commonwealth. They form a state park which is more accessible to more people - in terms of both distance travelled and availability of public transportation - than any other. They offer tremendous potential not only for recreation but as an urban amenity with tangible economic and social benefits for Boston and the communities surrounding the Harbor. Their importance has been recognized in the Boston Harborpark Plan, with which plans for the State Park must be integrated.

The Islands provide an experience of natural wildness at the very heart of the Boston metropolitan area. The power of natural forces to restore an environment once transformed by human activity is evident on all the Islands.

The Islands are also richly endowed with the history of the Harbor, the gateway to the hub of world commerce for over two centuries. The Islands provide a unique vantage point from which to explore the history of the communities to which they closely relate: commerce emanating from Long Wharf to the ports of the world; shipbuilding

in East Boston, Hingham, and Quincy; the British evacuation from Dorchester Heights in South Boston; fishing, farming, and harbor defenses in Boston, Winthrop, Weymouth and Hull; and the growth of Boston into the Harbor through landfill.

The Islands have enormous recreational potential for residents of the Harbor's local communities, the region, and the state. This potential is currently being tapped by the approximately 200,000 persons who visited the Harbor Islands last year, coming by small boat or ferry and water taxi. But the number of persons who now enjoy the Islands is only a fraction of the total number who would do so if more information, transportation service, and facilities were provided. Many people see the Islands offshore from their community but have never had the opportunity to visit them; many more know that the Islands are there but have not yet seen them first hand. The actions recommended in this Plan will make the unique island experience available to these people and do so in a way that preserves the resource for all.

"As large numbers become interested in aquatic sports and seaboard scenery, the attractiveness of its harbor is to be reckoned no insignificant element of the trade and prosperity of the city."

— Frederick Law Olmsted



Harbor Islands ferry leaving the inner harbor past Castle Island, South Boston

The 1986 Master Plan for Boston Harbor Islands State Park builds on the experience of the years since the General Court recognized the importance of the Harbor Islands in Chapter 742 of the Acts of 1970. The 1972 comprehensive Plan for the Park has guided improvements to the Harbor Islands for the past twelve years; the 1986 Plan builds on the foundation of the earlier Plan, but differs from it in many instances in the light of current experience. The 1986 Plan provides the framework for the next decade of Park development and management through a program of coordinated actions based on policies intended to strike an appropriate balance between preservation of the unique qualities of the Islands and making the island experience available to more people. These layers of the Plan are briefly described below, starting with this central trade-off, and building through policy themes to actions.

The Central Issue

Quantity versus Quality – Examples of unique resources that have been destroyed by their own “success” are not uncommon. Surveys of Harbor Island visitors indicate that while improvements are desired (food, water, and comfort facilities; more information; better transportation; improved recreational opportunities) the fragile and subtle qualities of the Islands are very much appreciated as they are. An unhappy scenario for the Islands would see inappropriate development detracting from this environment and spoiling

the Islands for both human visitors and wildlife communities. The Plan is committed to preventing this scenario from occurring.

On the other hand, it is a basic goal to make the Harbor Islands experience available to more of the Commonwealth’s residents. This is a goal based both in equity and in wise use of the financial resources needed to operate a state park. Can greater quantity in terms of the number of people served be provided without a loss of quality? This Plan answers that question in the affirmative.



Buttercups, Gallops Island



Georges Island



DEM dinghy for use by private boaters anchoring offshore

Other Issues

Visitor preferences are expressed in the pattern of what people do at various locations in the Harbor and in their responses to DEM visitor surveys. The success of the picnic areas on Georges Island and the gazebo at the pier on Gallops are two examples.

Harbor water quality improvements are expected over the ten-year horizon of the Plan. Construction of a secondary treatment plant for the metropolitan district is planned on Deer Island.

Seasonal Factors limit access in winter and provide a variety of island experiences from spring to fall.

Waste disposal must be addressed, especially at the concentrated activity areas, to avoid environmental impact.

Fresh water is currently available only on Peddocks, Georges, Thompson, and Long Islands. Groundwater development and transport of water are two possible solutions.

Protection of improvements from storm damage and vandalism is a significant problem that must be addressed through a combination of design, siting, and policing.



Solar composting toilet on Gallops Island, destroyed by fire in 1982

Maintenance requirements will increase in proportion to the area in park use and the extent of improvements made to the Islands. For this reason, a conservative attitude should be used in planning and designing improvements, but the increase in maintenance requirements should be accepted as a necessary cost of serving more visitors.

Management requirements for staffing and support personnel will also increase as the Park grows, and there must be effective coordination of effort and communication both within and between the operating agencies.

Transportation scheduling and support plays a large role in a park served primarily by water transportation. As Park use expands, the transportation network will become more complex, and better coordination and information will be needed on shore.

Safety and Law Enforcement are vital issues that must be addressed through a wide variety of actions ranging from installation of guard rails on high structures to adequate police capability and interagency radio coordination. These efforts are essential to protect visitors and staff and to preserve costly park improvements.

Fire Protection must be provided both for structures and island vegetation; adequate staffing and equipment are needed, as well as water supplies for fire fighting.

Approach

Each island is unique in the overall impression it gives to those who visit it, and appreciation of its special qualities becomes greater as one spends more time there. The Plan addresses the Harbor Islands from many viewpoints but is based on an understanding of this existing environment. The Plan's viewpoints include general policies, visitor preferences, management issues, and themes that tie the Park together as a whole.

Policies

Providing recreational service to more people without compromising quality is possible through appropriate policies. These can each be expressed in a single word.

Recreation means that opportunities should be provided for activities that a variety of people would like in a state park, but provided in ways that don't conflict with preservation of the island environment.



Georges Island

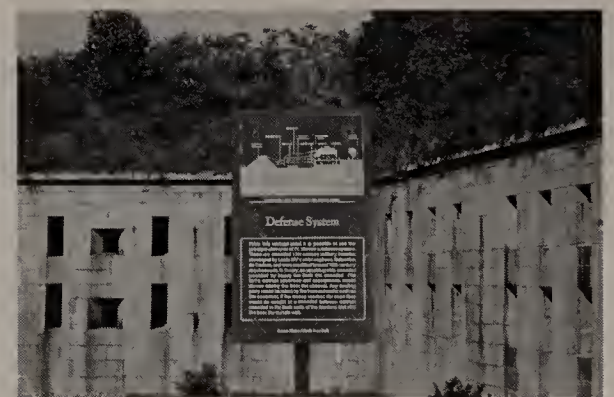


Access means that both information and transportation services should be provided as widely as possible to make full use of the Harbor Islands' recreational potential and to serve people as fully as possible regardless of their place of residence, race, income, age, sex, or handicap.

Preservation means that both natural resources (such as wildlife habitat) and cultural resources (such as historic and archaeological remains) should be protected and restored.



Great Brewster Island



Interpretation means that there should be an emphasis on programs and information to make people aware of what these existing resources mean, which enriches their visit to the Islands.



Grape Island

Actions

Several kinds of actions are recommended to implement these policies. Some types of action may serve more than one policy. Application of these kinds of actions to specific situations is described in a later section on proposals for improvement of the Park.

Development involves physical improvements to control erosion, house management and interpretive activities, provide recreational facilities and visitor comforts, and support transportation

service. In keeping with the policy of preserving the island environment, development should in general be small scale and designed not to intrude and change the character of the Islands. The Plan recommends that larger scale development to accommodate many visitors should be concentrated near the piers and limited to four locations on Spectacle, Long, Georges, and Peddocks Islands plus mainland facilities on Long Wharf in Boston and Hewitts Cove in Hingham.

Management includes a variety of actions by Park staff: selective improvement of natural habitat based on study of potential and desirable wildlife communities; erosion control and maintenance of trails and facilities; operation of facilities and provision of services related to visitor comfort, safety, and security. Management also involves effective coordination of the public agencies and private groups that play a role in the Boston Harbor Islands State Park.

Information and Marketing is a special aspect of management that deserves separate emphasis. It includes preparation of information related to both interpretation and access to the Park and should continue to emphasize personal contact with visitors by the Island Managers. This type of action can take the form of outreach and marketing through various media, visitor center programs and exhibits, trail markers and on-island programs and information. Special emphasis should be placed on attracting local urban residents.

Transportation Service can be improved through increased schedules on large ferry and excursion boats and the DEM water taxi, and by development of land-based connections to the departure points of these boats. Special programs for low income and special needs groups should continue to be provided by DEM.



Open fields: Long Island



Salt land: Lovells Island



Drumlin: Great Brewster Island



Beach: Long Island



Wooded area: Long Island



Landscaped area: Georges Island

The Island Environment

The Islands offer a variety of settings for habitat and visitor use, each with its own potential and constraints.

Drumlins are glacial deposits that form most of the hills on the Harbor Islands. Where they form eroded heads, expensive seawalls are needed to protect them. Drumlins offer views and remind the visitor of the close connections of the Islands with the mainland, surrounding water, and each other.

Ledge is rare in the Harbor Islands but acts as natural sculpture on islands such as Rainsford and the Brewsters.

Beaches reflect the work of wave action on differing soil types. Sandy beaches are rare in the Harbor, ranging in texture from fine gravel to stones and boulders. Beaches provide good picnic spots, with low fire hazard and good views of private boats moored offshore.

Dunes exist primarily on Long, Lovells, and Peddocks Islands. They are beautiful but very fragile; access should be limited to boardwalks or skirt the area entirely.

Salt Lands occur on Long, Lovells, Peddocks, Grape, Great Brewster, and Thompson Islands. They are important wildlife habitats and excellent areas for natural interpretation; access should be limited to protect them.

Wooded Areas are found on Long, Lovells, Peddocks, Grape, Thompson, and to a lesser extent on Gallops, Great Brewster, Rainsford, Spectacle and Bumpkin Islands. These areas have great habitat value and provide desirable settings for campsites. Planting of new stands is recommended.

Shrub Areas include sumac, berries, brambles, and other early succession plants. Extensive areas exist on almost every island. Tall stands of sumac provide a surprisingly attractive trail border on Bumpkin and Gallops, and sumac stands are also suited for campsites and as borders to picnic areas. The great areas of sumac growth are generally underutilized; selective clearing to open field or establishment of hardwoods based on scientific study of habitat may be beneficial.

Open Fields exist on Bumpkin, Gallops, Great Brewster, Long, Lovells, Rainsford, Spectacle, and Thompson Islands. These areas have to be maintained by occasional mowing or they will succeed to shrub. Fields are attractive areas to walk around or through, providing wide vistas, and they have important habitat value.

Trails are the main organizing element in the island landscape. Covered with pavement, soft mowed grass, or even mussel shells, they can be used for interpretation, to provide views, for access to activity nodes, or simply for interesting walks around the Islands. The complexity of the trail system should be minimized to help orient the visitor, and shade and views should be provided at intervals.

Landscaped Areas include pier areas, picnic and camping sites. These may be simply open mowed grassy areas or have shade trees and furniture such as picnic tables, benches, and grills. Large areas such as the picnic areas and parade grounds are successful on Georges Island where crowds are an accepted part of the setting, but smaller areas on the other islands seem to be the most successful because they offer a more intimate and private space.

Structures range from old foundations to major gun emplacements and forts. The larger military structures should be preserved and restored for interpretation; however, safety improvements are urgently needed where they are actively used. Fort Warren, a National Historic Landmark, deserves special attention.

Structures should be limited in size and number to fit with the overall image of the Islands, but the need exists for more shelter from the sun near the piers and for interpretive/management centers, concession space, and toilets.

Wooden structures are attractive but vulnerable to arson and storm damage in the off-season. Alternatives such as fabric-covered frames for shelter and floating structures which can be removed when an island is closed for the season are recommended where practical.



Spectacle Island



Gallops Island lookout

Themes that Guide the Plan

Natural forces are evident everywhere in the Harbor and are responsible for the special beauty and sense of natural wildness that gives the Harbor Islands their appeal. Both the physical forces of sun, wind, and tide, and the biological process of natural succession shape the Islands and tend to oppose and erase the changes brought about by human activity. The contrast between this sense of wildness and views of the Boston skyline and evidence of natural forces "reclaiming" island areas almost totally altered by human activity give one a stronger appreciation of wildness and the resilience of nature than would a completely wild and remote area.

The Park should give strong emphasis to natural forces by preserving this sense of contrast with the mainland and remnants of human activity on the Islands. Interpretive programs should make full

use of the opportunities to study and appreciate the Harbor's natural systems. Development should be located and designed both to protect and preserve wild areas and should on the one hand avoid the destructive potential of natural forces and on the other enhance the visitor's appreciation of orientation to the sun and wind and his/her sense of tidal and seasonal cycles.

Harbor Geography shapes and is shaped by natural forces and it provides a very strong theme for organizing the Park. Historic activities and transportation in the Harbor were almost wholly shaped by its geography. The sense of relatedness or contrast between islands and the mainland is different for every island (e.g., South Boston as seen from Spectacle or Hull as seen from Bumpkin). The subtle differences in natural areas on the Islands have to be understood first in terms of the island's location in the Harbor.

The Park should use development and interpretation to orient the visitor to his/her location in the Harbor and to provide a basic understanding of the Harbor's layout in three bays with distinct island groupings. This can be done by making special use of the several lookout points in the Harbor from which one can see from one bay or island grouping to another, and by using the interpretive material on one island to "preview" what can be found on another.



Harbor Subareas

* Important Vantage Points

Harbor Transportation is shaped by the geography of the Harbor and strongly related to its history. The trip to the Islands is a major part of the visitor's overall experience, and this can be enhanced further if the things one sees from the boat are understood. Navigation aids such as lighthouses and buoys can be seen and explained from numerous vantage points within the Harbor. Watching the parade of freighters, tankers, tugs, fishing and lobster boats, commuter boats and pleasure boats offers enormous interpretive potential and focuses on the majority of the Harbor which is water rather than islands. The transportation theme can also address air transportation and thereby make use of the dramatic sights and sounds of aircraft as a positive attraction rather than simply a source of noise pollution.

Harbor History is a theme that relates to the Harbor's natural systems, geography and Harbor transportation. Historic interpretation can cover the range of human activity from prehistoric settlements, which were present on many of the islands, to the present. Historic remains are present on all islands, and through them both the positive and negative aspects of man's alteration of the islands and changing attitudes toward them can be developed. The historic theme also helps to provide coherence to the Park, as seen in the pattern of fortifications to protect the port of Boston from naval attack or the use of the sheltered Hingham Bay Islands for farming. The Islands also provide a unique vantage point from which the historic development of mainland communities such as South Boston and Hull can be presented.

The five major intensive use areas of the Harbor Islands State Park can each develop the historical theme in different but complementary ways. Spectacle and Thompson provide opportunities to develop the theme of mainland development into the Harbor and Revolutionary War history with emphasis on South Boston, East Boston, and Winthrop. Long Island has a major fortification from which all the forts protecting the Harbor can be seen in relation to the Harbor's transportation network. Georges Island should make full use of Fort Warren, a National Historic Landmark, which can be restored and experienced close up, inside and out. Peddocks Island has a nearly intact collection of buildings remaining from Fort Andrews in which community life on a Harbor Island can be experienced; it also offers a window into Hingham Bay and opportunities to experience historic island subsistence through farming and fishing.



Boston Light, Little Brewster Island



Gun emplacement, Georges Island



Boston Harbor, 1775

Use Levels



Island Visitation in Season*

| Island | Average | | Peak | Total Season |
|-----------------|---------|------|-------|----------------|
| | Sat. | Sun. | | |
| Bumpkin | 97 | | 143 | 4,000 |
| Gallops | 218 | | 495 | 6,500 |
| Grape | 182 | | 310 | 6,000 |
| G. Brewster | 88 | | 165 | 2,500 |
| Lovells | 290 | | 540 | 8,000 |
| Subtotal | | | | 27,000 |
| Georges | 2,650 | | 5,000 | 120,000 |
| Pedlocks (1984) | 80 | | 350 | 18,000 |
| Thompson (1983) | | | | 32,000 |
| Total | | | | 197,000 |

*Based on 1981 and 1982 seasons, July 1 through Labor Day. Pedlocks Island Trust, Inc., and Thompson Island Education Center, Inc. provided data for these islands.

Existing

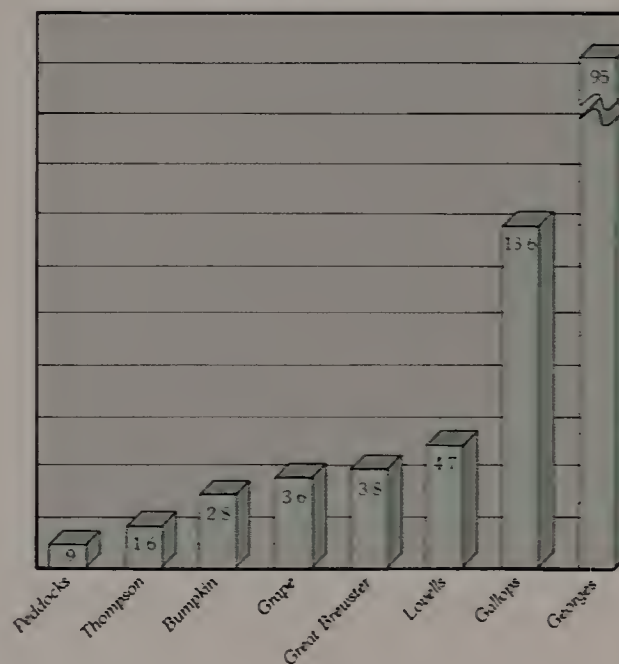
The Harbor Islands currently receive an estimated 220,000 annual visitor trips, nearly 200,000 of them during the peak summer season. Most of these visits occur at Georges, which has frequent, direct ferry service.

Average weekend-day visits range from entirely by private boats on Great Brewster, to 89% by private boats on Grape, which lies close to the mainland, to 58% on Gallops, which lies farther from shore and has more frequent water taxi service.

Use of Georges Island, handling 95 people/acre on average weekend days is nearly an order of magnitude higher than for any other island. Gallops comes next with 14 people/acre. Other islands served by water taxi range from 3 to 6 people per acre on average weekend days.

Current Intensity of Use

Average Saturday/Sunday Use/Acre



Future

Based on analysis of the capacity of trails, beaches, and picnic areas on each island, which agrees generally with the judgment of Park staff, it is concluded that visitation levels can be increased by a third on Grape and Bumpkin, and by a fourth on Lovells. No increases should occur on Gallops or Great Brewster. Georges Island is currently at or above capacity; new visitation should be diverted primarily to Pedlocks, Thompson, Long, and ultimately, Spectacle Islands. Each of the major public islands can handle average visitor loads of up to 2,500 visitors on weekend days, and the visitor season can be lengthened; both will contribute to greatly increased annual visitation.

Based on the above estimates, the proposed, year 2000 visitation to the Harbor Islands is 600,000 visitor days per year. This is a supply-side estimate, based on what the major visitor areas and moderate use islands can comfortably accommodate. Does the demand exist for this number of visits to the Park?

The Harbor Islands which have been developed for recreational use, and which have ferry or water-taxi access, have rapidly grown in visitation; many are approaching or have exceeded their comfortable capacity levels. Studies by DEM indicate that, statewide, hiking trails and water-related recreation facilities are the two most needed types of additional recreation facilities.

Comparable recreational opportunities in the Boston area include the Children's Museum (400,000 annual visits), Crane's Beach (450,000 visits)

and Boston Red Sox games (1.8 million paid admissions).

Visitation at major parks in other cities also indicates the Harbor's potential. Adjusting for metropolitan area population, the projected visitation at Boston Harbor Islands State Park represents 22% of the Boston area population; the **current** visitation at individual island sites in the Golden Gate National Recreation area range from 3.5% to 11% of the area's population, and the five sites in New York's Gateway National Recreation Area draw 65% of the area's population each year.



Georges Island

Harbor Islands Projected Visitation Compared to Current Attendance at Comparable Attractions

| Park | Cost | Annual Visitors | % of Market |
|--|----------------------|-----------------|-------------|
| BOSTON METROPOLITAN AREA (Market Area Population: 2,763,000) | | | |
| Boston Harbor Islands, Year 2000 | \$3-4/person | 600,000* | 22% |
| Comparable Boston Attractions (Current Attendance) | | | |
| Children's Museum | \$3-\$4/person | 400,000 | 14% |
| Red Sox Games | \$3-\$8/person | 1,782,285 | 65% |
| Tea Party Museum | \$1.50-\$2.25/person | 150,000 | 5% |
| Crane's Beach & Castle | \$7/car | 450,000 | 16% |
| Lowell Heritage Park | No fee | 172,000 | 6% |
| SIMILAR PARKS | | | |
| New York City (Market Area Population: 16,120,346) | | | |
| Gateway National Park | No fee | 10,421,510** | 65% |
| San Francisco (Market Area Population: 5,179,784) | | | |
| Golden Gate National Recreation Area (15 sites), Fort Mason | No fee | 19,700,000** | 380% |
| Alcatraz Island | | 2,882,230 | 56% |
| Angel Island, San Francisco | \$2.75-\$6.00/person | 568,781 | 11% |
| | | 180,000 | 3.5% |

*Projected year 2000 capacity

**Open year-round

% of market is based on the standard consolidated statistical area population of the center city and surrounding areas in 1980.

Recommendations for Development



The 1986 Master Plan for the Boston Harbor Islands State Park takes a new look at development which has occurred within the park within the framework of the 1972 Comprehensive Plan. On islands such as Grape and Great Brewster, development which has occurred to date seems adequate and appropriate for the future. On other islands, additional actions are needed. Where no development has taken place yet, new concepts based on current experience are proposed, or, in the case of Brewsters and Slate Island, it is recommended that no development for active use should occur. Plans for Nut, Moon, and Deer Islands will continue to evolve as final sewage treatment and pumping facilities are designed.

A Long Range View of Boston Harbor Islands State Park

When the Plan for the Boston Harbor Islands State Park is fully implemented, total visitation will have increased from the present 200,000 per year to 600,000 or more. Yet, there will continue to be islands visited mainly by birds, and other islands that currently have comfortable levels of visitation will continue to be places where one can find quiet and solitude. The quality of the natural environment of the Harbor Islands will be higher than at any time since the Park was created, but more people in the region that surrounds the Harbor will actively enjoy it.

The strategy for bringing this vision of the future into reality has three major components: (1) working with the geography of the Harbor Islands to handle the more than three-fold increase in visitors without damaging sensitive areas, and using as yet undeveloped islands; (2) increasing the length of time the Islands are accessible to visitors each year; and (3) using good management to accommodate larger numbers of people and to improve the natural habitat as well as the landscaped areas of the Harbor Islands.

Working with the island geography means that **intensive use** will occur only at limited areas on five islands (Georges, Long, Peddocks, Spectacle and Thompson). There will be little or no increase of visitation on a second group of **moderate use** islands (Bumpkin, Gallops, Grape, the southern half of Long, and Lovells), and very little human activity on a third group of **low use** islands (the Brewsters, Rainsford, and Slate). The transportation system of ferries and water taxis is an effective way to direct visitors to island areas in accordance with this strategy.

In the near future, people will be able to visit the Islands earlier in the spring and later in the fall. Long Island can be reached by limited overland access on days when ferry excursions are made uncomfortable by spring or fall wind conditions, and the Long Wharf visitor center will be open for year-round programming.

Finally, management will provide the support needed for high levels of use at a lower cost per visitor than at present, and will be applied toward the realization of Olmsted's vision of the Boston Harbor Islands returned to the natural beauty that preceded their deforestation.



Long Wharf has aptly been called a window on Boston Harbor: improvements planned there will greatly increase public awareness of the Harbor Islands and are the key to greater Park visitation. Currently serving as one of the major downtown embarkation points for the Boston Harbor Islands State Park, it will be the site of the first major improvement to the Park. Under an agreement between DEM and the Boston Redevelopment Authority, there will be major upgrading of Long Wharf as a base for excursion boats and ferries to the Harbor Islands as well as touch-and-go space for commuter boats and other vessels serving the Harbor.

A Boston Harbor Islands State Park visitor center will be located at the entrance to the wharf, with connections to the Boston Harborpark pedestrian way proposed by the city. This visitor center will be a year-round facility offering programs on the Harbor, and will provide user information and coordinated ticketing for trips to the Park. Located near major historical, shopping, and tourist attractions, the visitor center and improved boat facilities can be expected to generate greatly increased interest in the Harbor Islands.

Summary

Remarks: To be developed and managed under joint control by DEM and BRA, with MDC participation in the Harbor Islands visitor center development; in conjunction with Rowes Wharf, the primary embarkation point to the State Park.

Existing Elements:

- Hotel, restaurant, shops, residences.
- Private excursion and commuter boats serving Boston Harbor Islands State Park.

New Elements:

- Improved and reorganized docking and support facilities for privately operated Harbor Islands ferry service, excursion boats, and commuter boats.
- Boston Harbor Islands State Park Visitor Center with space for interpretive exhibits, information, and ticketing/dispatching.

Cost: \$9 million by DEM



Long Wharf (left) and Boston Harbor, 1868

Long Island



Long Island Light

Long Island, currently owned by the City of Boston, is the next major addition to the Boston Harbor Islands State Park. With an area of 214 acres, Long Island is large enough and diverse enough to accommodate both park activities and institutional uses.

Long Island's central location in the Harbor and its connection to the mainland also give it a special potential. Even if automobile access through the Squantum neighborhood of Quincy is limited, bus, bicycle, and boat access can be combined effectively.

While the plans presented here are conceptual only, Long Island can potentially accommodate park use at levels comparable to Georges Island. Major Park themes can be served by the Head, which contains an historic lighthouse and major gun emplacement from Fort Strong, and which has excellent views of Harbor geography, fortifications, and transportation systems. An archeological museum proposed for Long Island by the city would be an excellent part of this overall concept.

The southern half of Long Island is one of the Harbor's best areas for moderate intensity use for hiking and nature study; it contains a large wet meadow area, a dune environment, a large area of meadow succeeding to woodland, and a large grove of mature pines. It offers the best opportunity in the harbor for bicycling on trails, and it has potentially one of the best beaches in the Harbor.

Long Island Head can comfortably serve 2,500 persons on an average weekend day. Major elements are safety improvements and stabilization of the main gun emplacement and batteries, a visitor center, interpretive trail improvements, selective clearing to open views from the top of the head, shaded seating area, and major picnic areas.

The southern half of the island could contain a supervised beach for up to 800 persons per day; another 500 to 700 persons would visit an environmental center overlooking the wetland or use combined hiking and bike trails with overlooks. Potentially, a future day camp can be located at the former Nike site. The beach area can be expanded if use levels indicate a need.



Gun battery atop Long Island Head



- Lookout
- Lighthouse
- New pier
- Gazebo
- Historic gun batteries
- Picnic Area/ playing field
- Historic gun battery
- New Road to head
- Long Island Hospital
- Hillside meadow
- Pedestrian/bike path with lookouts Rainsford and Peddocks Islands
- Lookouts to Spectacle and Boston
- Hillside meadows
- Future day camp
- Environmental center
- Viewing platform at pond
- Marsh
- Shelter and overlook
- Swimming beach
- Existing roadway to mainland (limited access)
- Dense pine grove



Long Island

Concept Plan





Long Island Head



Scheduled ferry service would be the primary mode of access during the summer months. The Head can be served by modifying existing ferry schedules to Georges Island. This can be supplemented by chartered or shuttle bus service from points such as the MBTA Red Line station at U Mass Boston, which can extend the usable season for the Park into the spring and fall. The southern half of the Island would be served by a small shuttle van running from the main visitor center at the pier on Long Island Head to the small environmental center near the wetland and beach. Daytime bicycle access (controlled at the existing guard house at the entrance to Moon Island) could also be permitted.

Summary

Remarks: Major vantage point for Harbor geography, transportation, and military history. Limited access via bridge; major public access via ferry. Tern nesting area at Head may require relocation.

Existing Use: None except hospital.

Future Use: Intensive (2,500 on average weekend day at Head; 1,500 or more at southern end).

Focus: Harbor overview; Harbor transportation and military fortifications; natural interpretation; picnics, swimming, fishing at pier.



Hillside meadow overlooking the harbor south of Long Island Hospital

New Elements:

- Pier.
- Visitor center with exhibits, concessions, and management space in existing building shells.
- Transportation exhibit at historic lighthouse.
- Stabilization and safety improvements to gun battery on head, plus interpretive trail overlooking the Harbor.
- Major picnic areas and playfields on parade ground.
- Natural interpretive area on southern half of island for moderate use.
- Future swimming beach.
- Bike path from head to mainland.

Cost: \$7.6 million



Building shells at Long Island Head to be reused for island headquarters



Beach south of Bass Point

Spectacle Island



East shoreline

This 97-acre island, now owned by the City of Boston and DEM, was the City's garbage dump until 1959. Originally, two drumlins connected by a narrow bar (hence its name), it has been filled with trash to a depth of 70 feet and now has a saddle shape. Evidence of the trash dumping can be found throughout most of the Island and its eastern cliffs are seriously eroding. Engineering studies reveal several problems requiring attention but no toxic wastes.

Spectacle will be the last major island available for intensive recreational use. Its location close to shore and its easily understood relationship to the mainland, Thompson and Long Islands, make it a natural candidate to provide the most general introduction to the Harbor, while the other islands serve repeat visitors and develop the Park's themes more specifically.

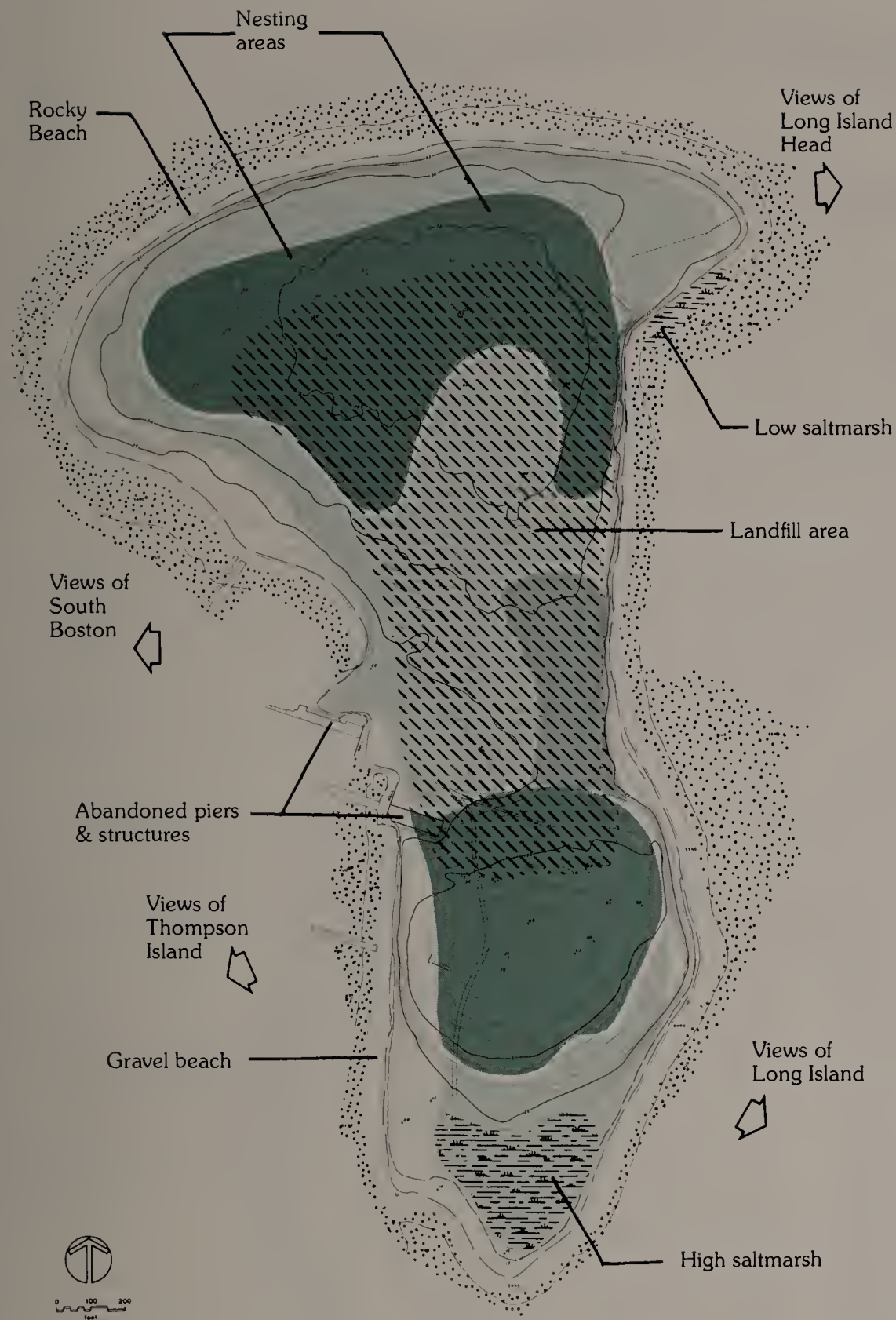
Whether or not it is developed for park use, Spectacle requires extensive stabilization to mitigate the environmental

impacts of the eroding landfill. This will consist of capping the landfill with clay, filling against the eroding slopes, and protecting these slopes with stone revetments. The Plan provides for creation of a saltmarsh edge to provide natural treatment for seepage of groundwater. The stabilization project will be most feasible if spoil materials from a major public project such as the Central Artery/Third Harbor Tunnel are utilized.





When developed for visitors, the Island will have a new pier, docking for transient boaters, visitor center, interpretive trails, broad meadows overlooking the bay, and stands of new and existing trees. The area near the pier has the capability to support a major recreational and cultural development; this possibility should be explored in the future through market studies to confirm demand and indicate the potential for commercial participation. The north and south ends of the island should support only passive recreation, and habitat should be maintained.



South Boston and Boston seen from Spectacle Island



Existing Conditions

- Legend**
- Woods 
 - Shrub Thicket 
 - Meadow 
 - Wetland 

Path with lookouts

Hillside meadow

New pier

Arrival area with exhibits, food, services

Swimming beach

Boardwalk across salt meadow

Environmental artwork

Salt marsh

Revetment

Hillside meadow

Path with lookouts

Pavilion with view of environmental artwork



Spectacle Island

Concept Plan

0 200 400

A major environmental artwork for Spectacle Island has been developed for the National Endowment for the Arts by the artist Keiko Prince. The artwork will hug the contours of the land and invite visitors to climb its low terraces, but when viewed from the Island's central path, it will indicate the sun's position and the observer's place in the compass by a unique pattern of shadows and reflected light.

Summary

Remarks: A major stabilization project is required (whether or not developed for park use) to cap the abandoned landfill and to stabilize shoreline erosion. Approximately three-fourths of the island will have to be regraded, freeing the design from some constraints in the area surrounding the pier.

Current Use: None.

Future Use: Intensive (2,500 visitors on average weekend day).

Focus: Introduction to Park (utilizing size and location close to Boston); relationship of island to mainland; picnics, swimming; potential recreational/cultural development to be explored.

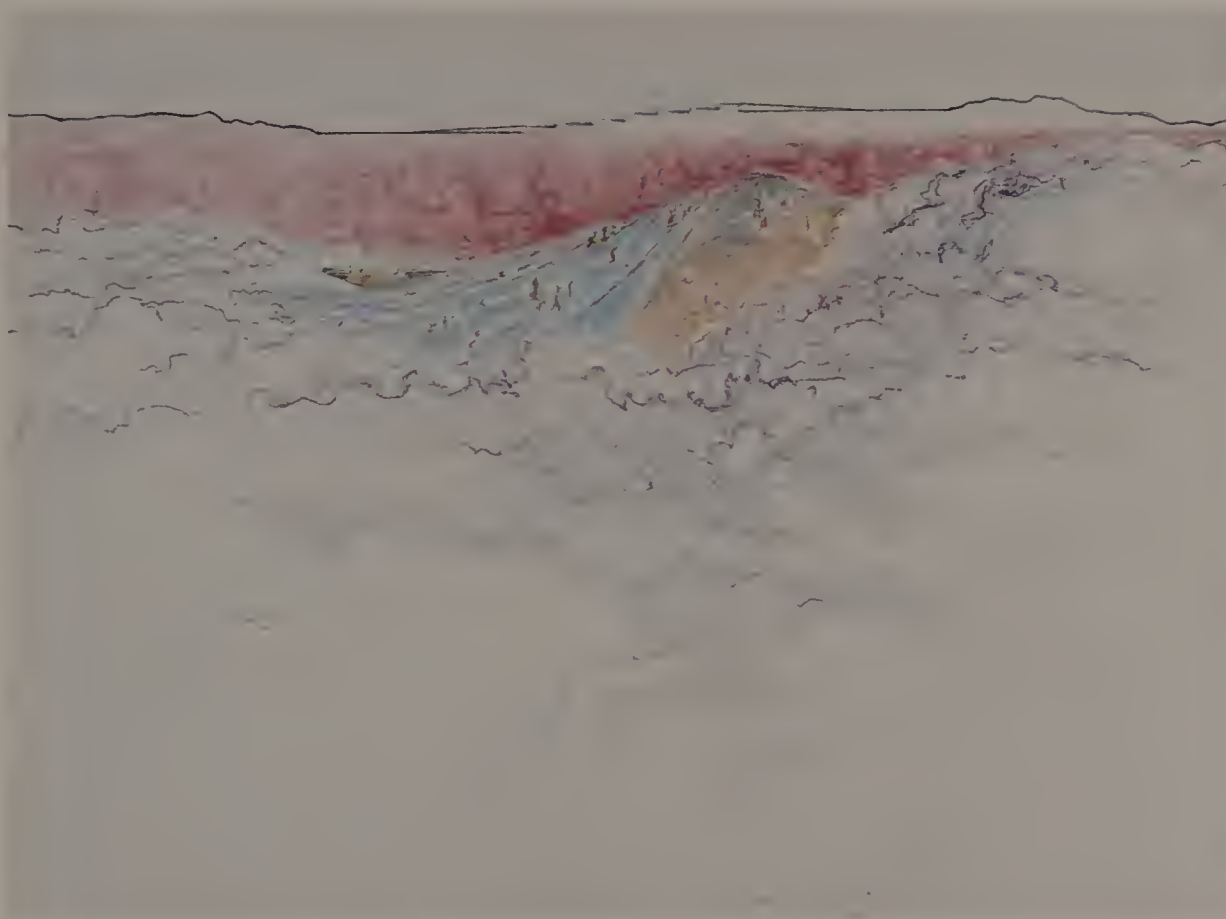
Major Elements:

- New Pier for ferries, water taxis, and transient boaters.
- Visitor center with exhibits, concessions and management space.
- Potential recreational development with commercial participation.
- Potential transient marina.
- Interpretive trails.
- Environmental artwork based on solar angles.*
- Picnic areas.
- Future swimming beach.

Cost: Stabilization - \$3 million plus acquisition.
Development: \$10 million.



View from south to north hill



The environmental artwork will have a cool, shaded area at its head, a warm, sunny one at its foot.
*Artwork concept and drawing copyright 1984 by Keiko Prince



Boston Harbor from a point over Hingham. Hewitts Cove is in the left foreground.

Georges Island



Fort Warren's guns being fired during World War II exercise

This 28-acre island is operated by the MDC. It is largely occupied by Fort Warren, a National Historic Landmark, and has a headquarters building, large pier, and two landscaped picnic areas. It is served by three commercial ferry lines on a regular schedule and is the hub for the DEM water taxi system. Georges is the most intensively used island in the Park, with average weekend day use of 2,650 and peak use of up to 7,000 for special events.

The popularity of George's Island as recreation area and increasing interest in Fort Warren as a unique historical resource have created a pressing need for safety improvements and repairs. Railings and other safety improvements to the Fort are urgently needed; repairs to the Fort, the pier, and the seawall are also of high priority within the Park as a whole. Future use of Georges should take advantage of its views, existing facilities, and accessibility but concentrate on its major asset, the Fort, which offers an intensive and specialized opportunity to experience the history of both the nation and Boston Harbor at first hand. A program of stabilization and restoration should be undertaken in the near term; improvements to the headquarters area and picnic areas, and expanded interpretive facilities in the Fort, are recommended.

Summary

Remarks: Most actively used island at present; visitation has reached level of diminishing quality of experience. Safety improvements on Fort urgently needed.

Current Use: Intensive (2,650 on average weekend day).

Future Use: Remains at current level.

Focus: Fort Warren historical exhibit; picnics.

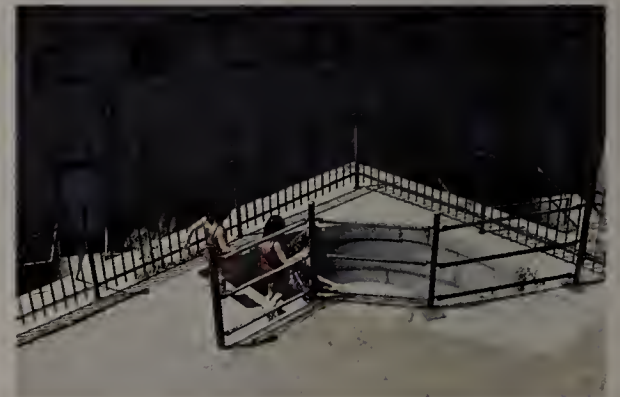
Existing Elements:

- Pier.
- Visitor center with concessions and management space.
- Fort Warren.
- Picnic areas.

New Elements:

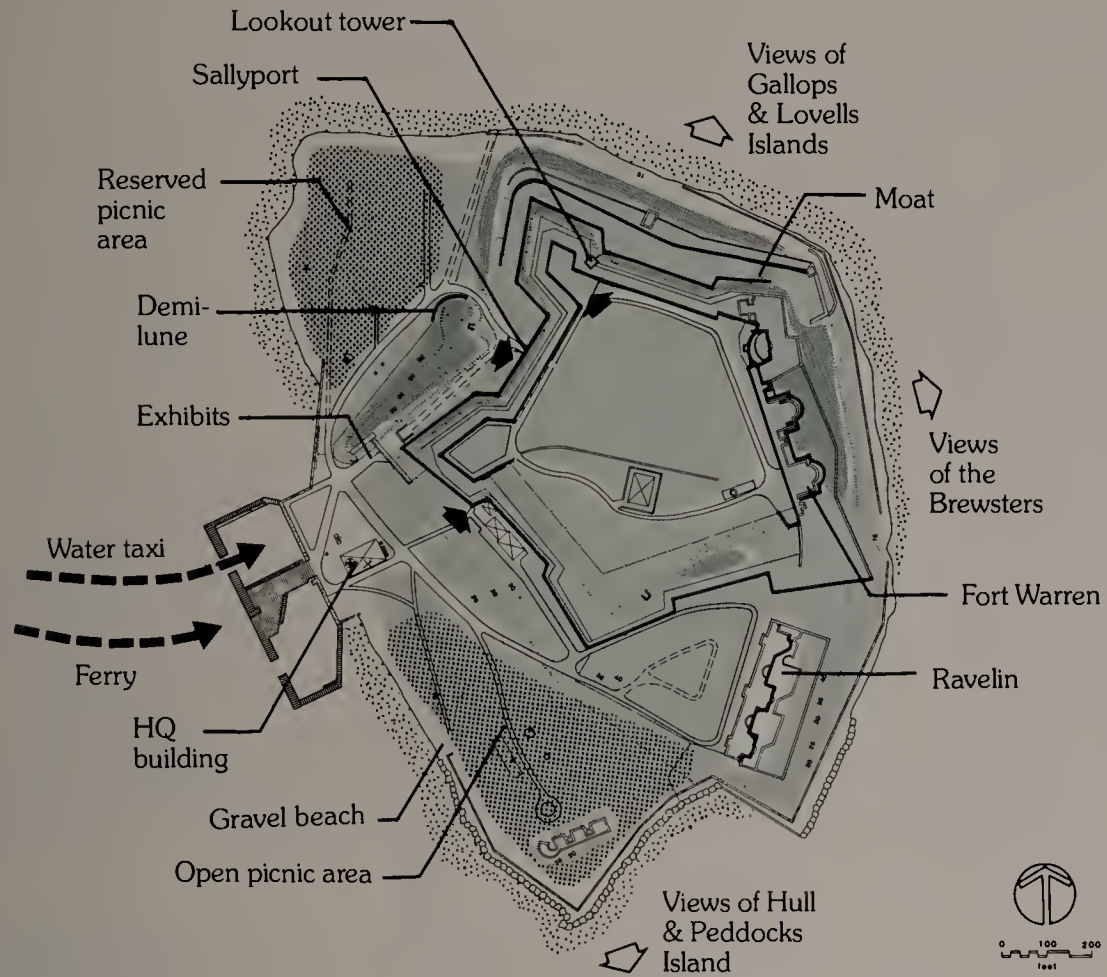
- Safety improvements to Fort.
- Repairs to pier and seawall.
- Restoration of Fort.
- Interpretive center in Fort.
- Picnic area improvements.
- Headquarters area improvements, including sun shelter and new toilets and disposal system.

Cost: \$1.9 million, plus restoration of Fort, \$8 million

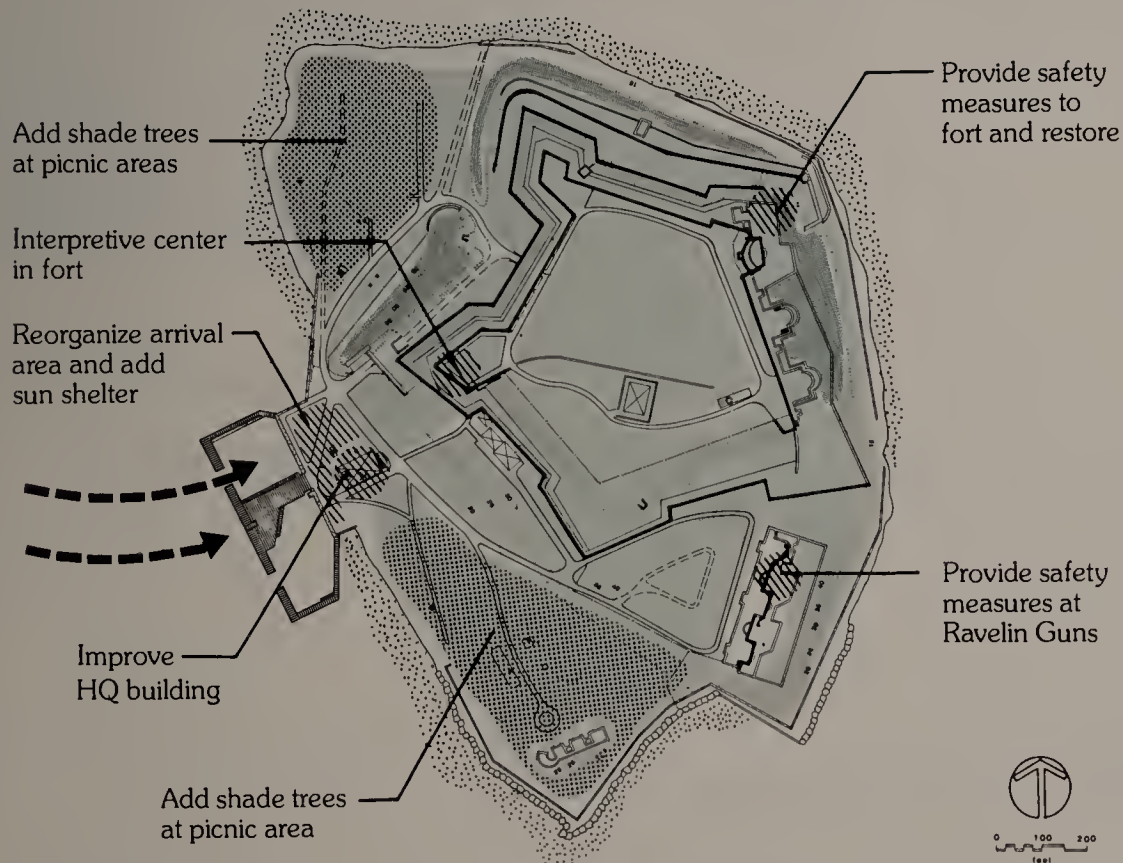


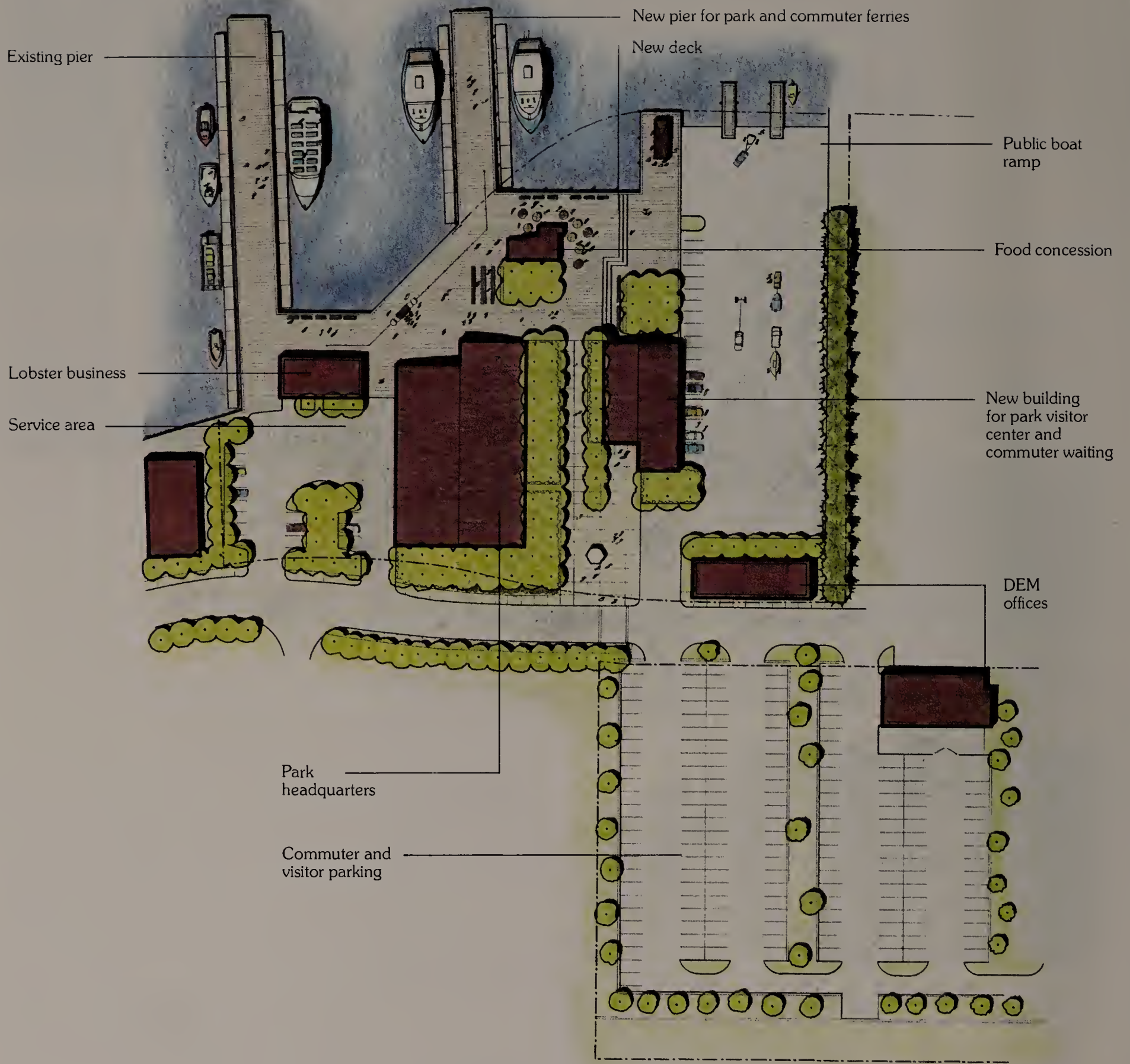
Safety improvements have been made on parts of Fort Warren but remain urgent priorities elsewhere on the Fort.

Existing Conditions



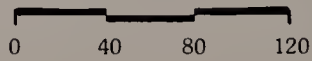
Concept Plan





Hewitt's Cove Headquarters

Concept Plan



Hewitts Cove Headquarters

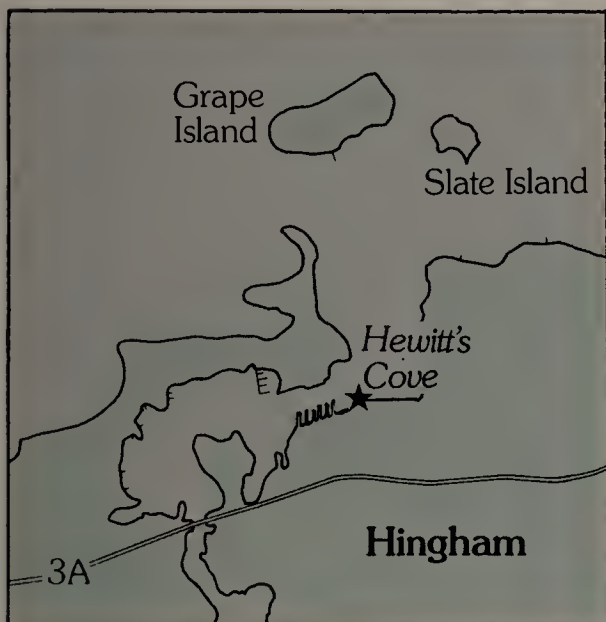
This eight-acre site supports the headquarters functions for the Boston Harbor Islands State Park and is the south shore hub for major commuter boat lines to Boston. There are three major buildings and a recently improved parking lot.

The proposals for Hewitts Cove increase its role as the south shore gateway to the Harbor Islands while at the same time improving the facilities used by commuters. Park management functions (including a staff resource center for the development of programs and interpretive material) are consolidated in the improved principal building, while a new building provides both shelter for commuters and space for Park exhibits and information. The new plan directs the public toward the piers and away from management areas. A new pier is added to provide sufficient capacity for commuter boats, while the

existing pier has one side reserved for Park management use and another side cross-utilized by management, Park ferries, and commuter boats. A public boat launching ramp, which is badly needed in the Hingham Bay area, is provided through improvements to the existing shipway.



Hewitts Cove improvements will serve both commuters and Harbor Islands visitors



Summary

Remarks: Boston Harbor Island State Park Headquarters and second major embarkation point to the Park. Major south shore commuter embarkation point.

Existing Elements:

- Office, shop, and storage space for Park management.
- Commuter boat parking and waiting area.
- Pier for commuter boats and Park management boats.
- Private lobster business.

New Elements:

- Additional pier to supplement commuter boat docking.
- Park visitor center/commuter waiting shelter.
- Public boat launching ramp.
- Staff resource center.
- Dormitory space for off-duty island managers.
- Landscaping and site amenities.

Cost: \$2.0 million.



Private lobster business and food concession will be tenants



DEM Harbor Islands staff, based at Hewitts Cove



View of the Harbor from planned small boat ramp

Bumpkin Island



Path near pier bordered by tall sumac

This DEM island has 35 acres of shrub thicket with some mature trees, paved and grassy trails, three picnic areas, and 12 campsites. It has a stone farmhouse and a hospital foundation, both used for interpretation, and a small unused stone building (without roof) near the pier. It is served by the DEM water taxi.

This island needs few improvements. Plantings, benches, and interpretive signage should be used to enhance the trail system, and a path should be provided to the north beach. Small breaks

in the foliage along the paths skirting the Island's edge should be added to give occasional glimpses of the Harbor. Bumpkin can be more fully utilized and will have improved habitat if areas of shrub thicket are selectively changed to open meadow or woodland. The small stone shelter near the head of the pier is recommended for adaptation as a seasonal interpretive center to hold exhibit space and materials.



Stone farmhouse remains on northern path

Summary

Current Use: 97 on average weekend day.

Future Use: 135 on average weekend day.

Focus: Natural interpretation, historic interpretation of farmhouse and hospital; camping, picnics, swimming.

Existing Elements:

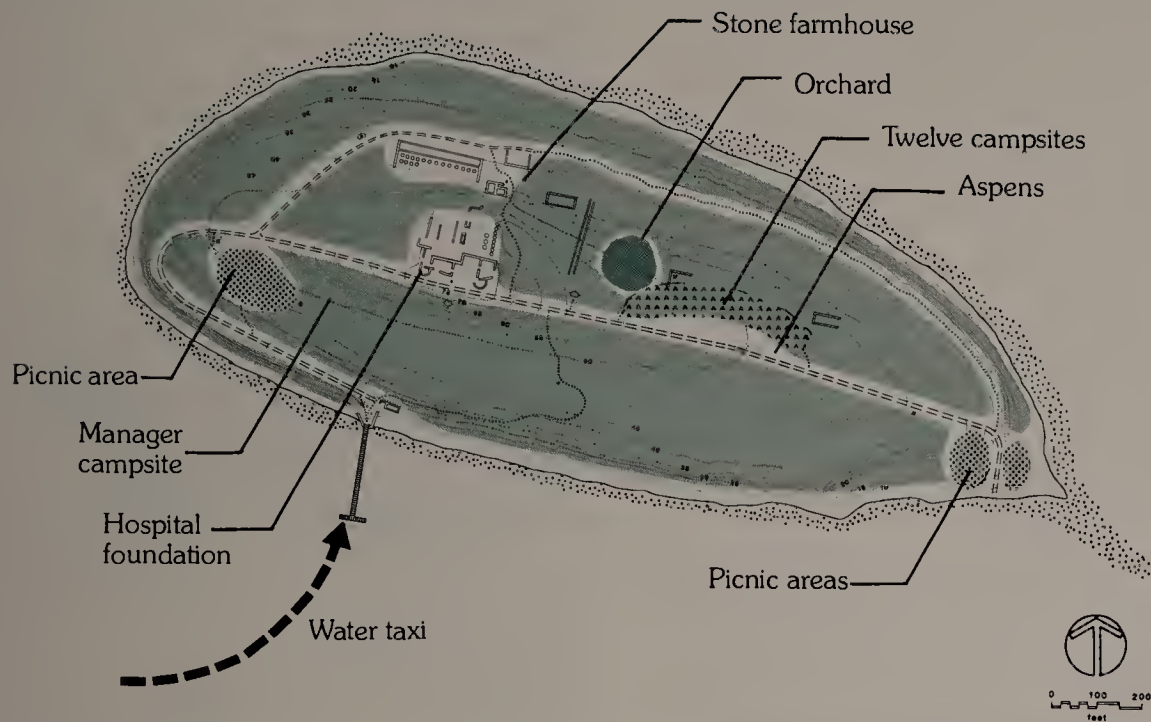
- Pier.
- Campsites.
- Picnic areas.
- Trails.

New Elements:

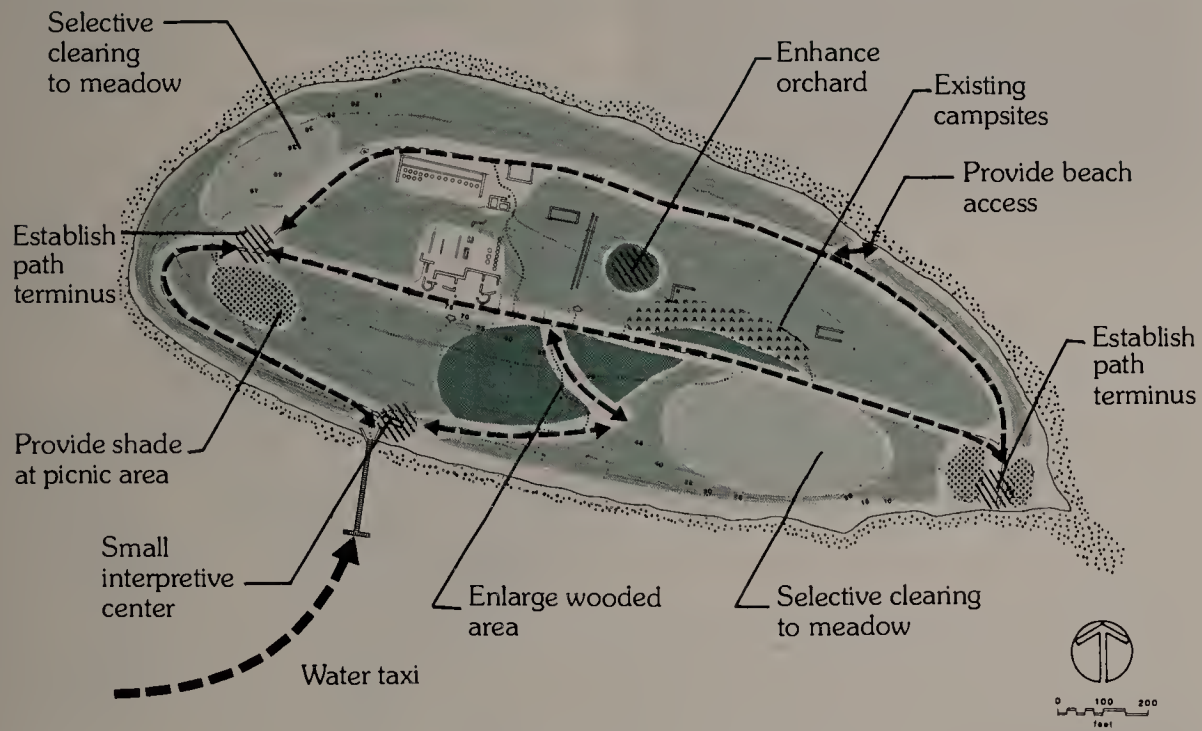
- Trail improvements.
- Interpretive center in small existing structure.
- Creation of two open meadows and improvement of tree stands.
- Potential well.

Cost: \$450,000

Existing Conditions



Concept Plan



Gallops Island



Gazebo and beach area near pier



Sheltered anchorage in the lee of the island

Gallops (DEM) is 16 acres in area and has a pier with a gazebo, picnic grounds, and varied paths. It is served by the DEM water taxi. The Island is a high drumlin with areas of shrubs, trees, meadow, saltlands, and landscaping from previous uses. There is a wooden gazebo (from which some visitors never stray) at the pier and an excellent look-out at the top of the main path. It has several foundations from a hospital and the maritime radio school which occupied much of the Island during World War II.

The plan for Gallops focuses on improving the clarity of circulation and relating the system to the Island's resources, by separating the paved, inward looking paths from the mowed outer paths that look out onto the Harbor. An experi-



Landscaped area dating from the 1800's

mental system of moorings should be considered for the sheltered anchorage area opposite the south beach of the Island. A floating structure has been investigated as an alternative to land-based facilities for a small interpretive center, manager's secure storage, and toilets. Mounted on a float which would accommodate small boat docking, it would be towed to the existing pier each summer and removed in the winter. This prototype may be a solution to the problem of winter damage to structures by storms and vandalism and may prove to be an alternative to building on the smaller islands.

Summary

Current Use: 218 on average weekend day.

Future Use: No change.

Focus: Interpretation of natural environment and remains of hospital and radio school; interpretation of Harbor geography; picnics, swimming.

Existing Elements:

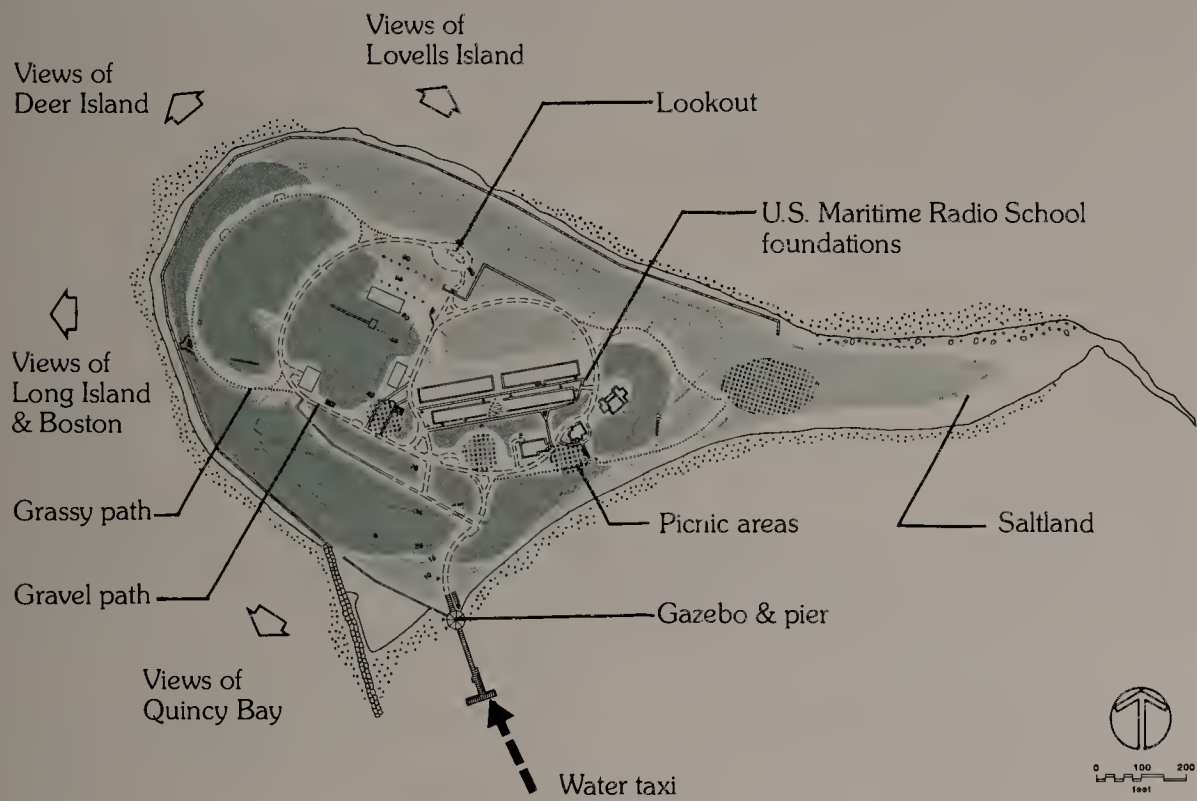
- Pier.
- Gazebo.
- Picnic areas.
- Trails.

New Elements:

- Trail improvements to clarify circulation.
- Development of tree stands.
- Floating management base.
- Moorings on trial basis.

Cost: \$460,000

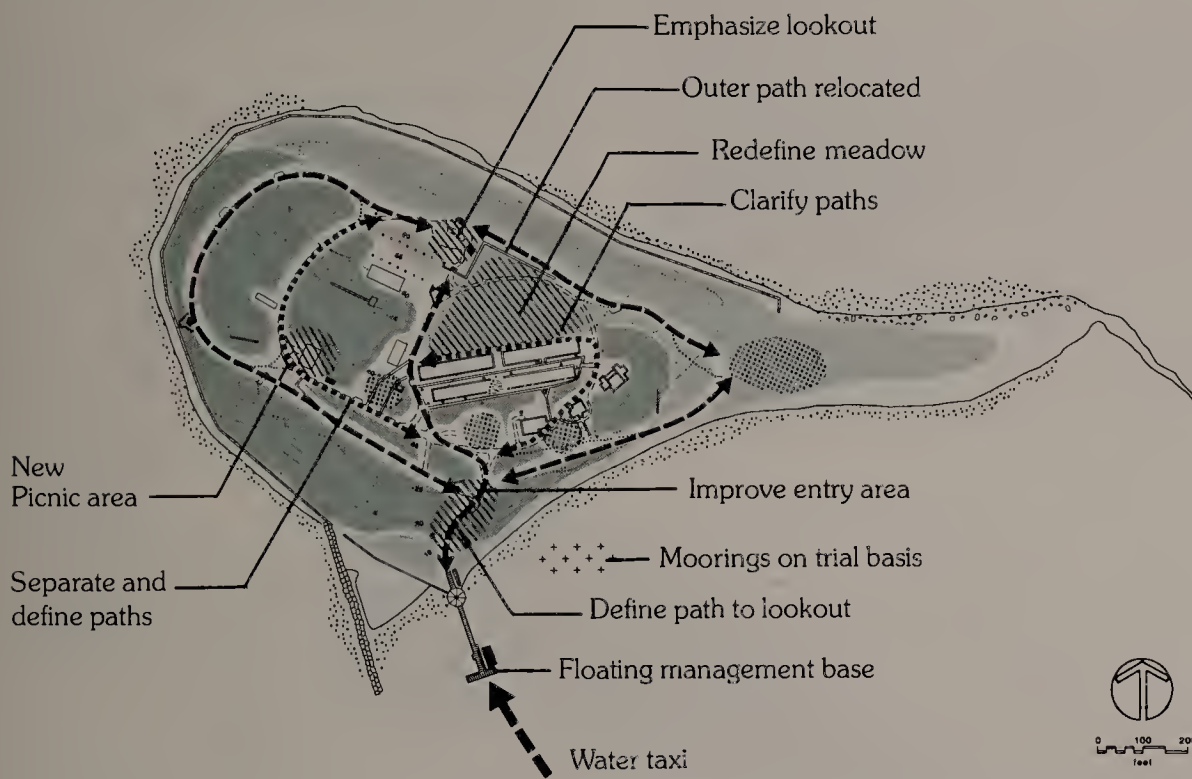
Existing Conditions



Legend

| | |
|---------------|--|
| Shrub Thicket | |
| Meadow | |
| Picnic Area | |
| Improved Area | |

Concept Plan



Lovells Island



Dune area at south end of the island

Lovells Island (MDC) comprises 62 acres and has campsites, a picnic area, extensive trails, and a supervised beach. It is served by the DEM water taxi. There are varied natural environments, including meadow, dunes, saltlands, and woods. Four pre-World War I gun batteries and other military structures remain from Fort Standish.

The concept for Lovells makes relatively few changes in the existing organization of the Island. Paths should be modified to protect the dune area and hardy vegetation should be established in the rubble and field areas behind the pier. Safety improvements should be made to the gun batteries and other structures.



Supervised beach near pier

The north end of the Island should remain a moderate use area; trail improvements should be continued past the salt marsh and meadow near the Island's north head. An expanded sun shelter is needed at the pier.

Summary

Current Use: 290 on average weekend day.

Future Use: 375 on average weekend day.

Focus: Interpretation of natural environment and remains of Fort Standish; swimming, camping, picnics.

Existing Elements:

- Pier.
- Supervised swimming beach.
- Trails.
- Camp sites.
- Picnic area.

New Elements:

- Expanded shade structure to serve interpretive needs.
- Trail improvements.
- Safety improvements to gun batteries.
- Informal playfield at existing picnic area.
- Protection of dune area.
- Establishment of vegetation in area behind pier.
- Informal rest area at north end of island.

Cost: \$600,000

Existing Conditions



Legend

- Woods
- Shrub Thicket
- Meadow
- Wetland
- Picnic Area
- Camping Area
- Improved Area

Concept Plan



Rainsford Island



View from slate outcrop to east head

This 11-acre island, owned by the City of Boston, has no facilities or regular users at present but receives informal picnic and camping use by private boaters. It is composed of a large east head and a small west head connected by a sandspit. It is largely open field with a small stand of hardwoods on the large head and attractive slate outcroppings. Rainsford's two curving beaches are composed of fine gravel and would be excellent for swimming if water quality were improved.



Aerial view with Long, Spectacle, and Thompson Islands in the background.

After acquisition, the highest priorities for this island should be stabilization of slopes and clean-up. The landforms of Rainsford and its open character and small size make the Island uniquely beautiful but comfortable for use only by small groups. The Island has many opportunities for special programming such as photography and drawing workshops. A small, floating dock, which can be removed in the winter, should be provided at the location of the former pier; its use would be limited to low-draft boats and possibly be usable only at mean-to-high water. Staffing would be during daytime only.

Summary

Remarks: Open landforms; location close to intensive use areas on Georges, Peddocks, and Long; shallow water makes access at low water extremely expensive to provide.

Existing Use: Some by private boaters.

Future Use: 50 persons.

Existing Elements:

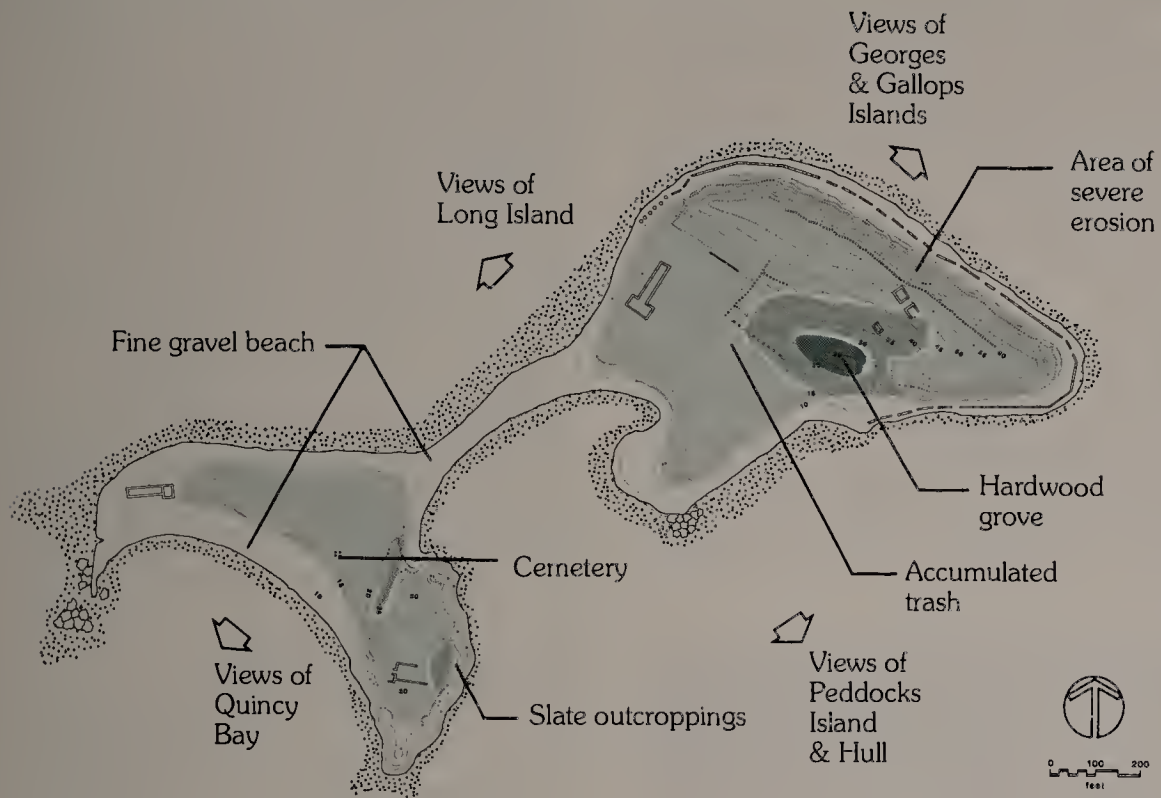
- Open fields.
- Tree grove.
- Historical remains.
- Fine gravel beaches.

New Elements:

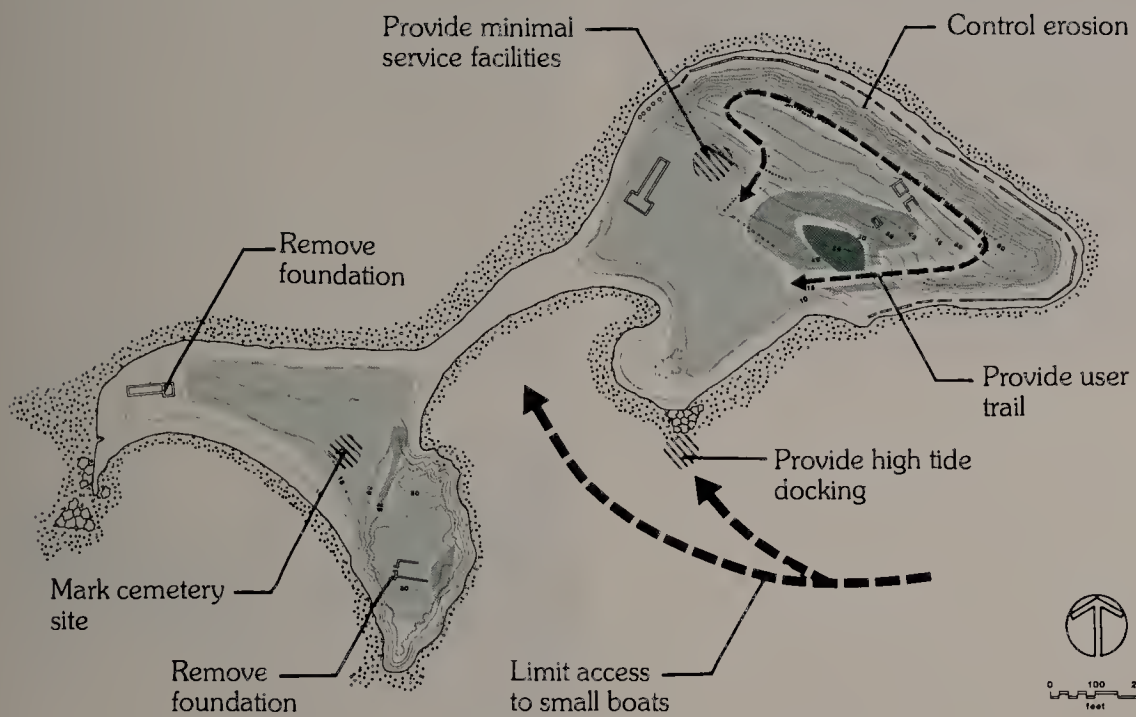
- Floating dock.
- Portable toilets.
- Seawall repair.

Cost: \$200,000 plus acquisition

Existing Conditions



Concept Plan



Private Initiatives



Thompson Island

Peddocks Island

With 188 acres, Peddocks Island is the second largest island in the Boston Harbor Islands State Park. It is a very rich and varied place, with three major heads connected by low tombolos. The 88-acre East Head is the site of Fort Andrews, of which 26 structures remain. Peddocks is served by direct ferry from Boston and Hull. Operated by the Peddocks Island Trust, Inc., under the supervision of the MDC, the island is integrated with the Park as a whole by programs, information, and the transportation system.

Through implementation of the Peddocks Island Master Plan, which is incorporated by reference in this Plan, East Head will become a major active use area utilizing the Fort Andrews buildings, which are being rehabilitated as a visitor center, education center, indoor recreation, marine sciences center, inn, hostel, expedition center, housing, artists center, sailing center, restaurant, and boat building center. Plans for the remainder of the Island include protection of West Head and the salt marshes as a wildlife sanctuary; existing cottage owners on the middle head will remain.



Peddocks Island

Thompson Island

This 157-acre island is owned and operated by the Thompson Island Education Center. It has over 32,000 visitors per year, many of them in programs for urban and suburban children and families which emphasize participation by persons of all racial and social backgrounds. Although privately owned, it has purposes in common with the publicly owned islands and is considered part of the Boston Harbor Islands State Park. Thompson is one of the most varied islands with mature woods, salt marsh and pond, meadow, and developed facilities. Like Peddocks, it is an island that can handle immediate growth and where private visitation is being encouraged; state participation should include coordination and support through public information and transportation.



Thompson Island

Grape Island

Grape Island (DEM) has picnic areas, campsites, grassy trails, and fifty acres of woods, salt marsh, meadow, and shrub land, including bayberry and blackberry. It is served by the DEM water taxi and visited by many small boats. The Island uses a historic farmhouse foundation as a focus for interpretation.

Grape Island is a flat-topped drumlin with rock outcrops at its eastern end. The berry shrub which covers much of the island is low-lying with many openings which provide views of the harbor and contrast with the wooded areas of the island; the shrub thickets also support a large population of songbirds. Harbor water quality near the island is relatively good.

Grape Island lies close to shore and is visited by many private boaters; however it lies at the end of the Hingham Bay water taxi loop and could accommodate more visitors if served by water taxi directly from the Hewitts Cove Park Headquarters.

The Island has recently been improved and is very popular among those who have visited it. Principal recommendations are for improved water taxi service and provision of drinking water and shade near the pier.

Great Brewster

The largest island in the Brewster group of nine islands, 23 acre Great Brewster (DEM) has a recently constructed pier, grassy trails, two campsites, and toilet facilities. Reached only by private boat, the Island still receives peak use of up to 150 on weekend days. It consists of a large central drumlin with deeply eroded cliffs, and a smaller drumlin at its south end. It has stony beaches on its west side from the base of the central drumlin to the long sandspit which extends halfway to Lovells Island at low tide; the remain-

der of the Island is surrounded by seawall and riprap (which are in need of repairs). Vegetation is largely sumac shrub with some larger trees on the drumlins and open fields with groups of wild roses on its flatter areas; there is a large seagull colony. Views of Boston Light on nearby Little Brewster are beautiful.

Like Grape, Great Brewster has recently been improved and is a successful and popular island. It should not receive heavier use, but should be made available to non-boaters by infrequently scheduled water taxi service.



Grape Island



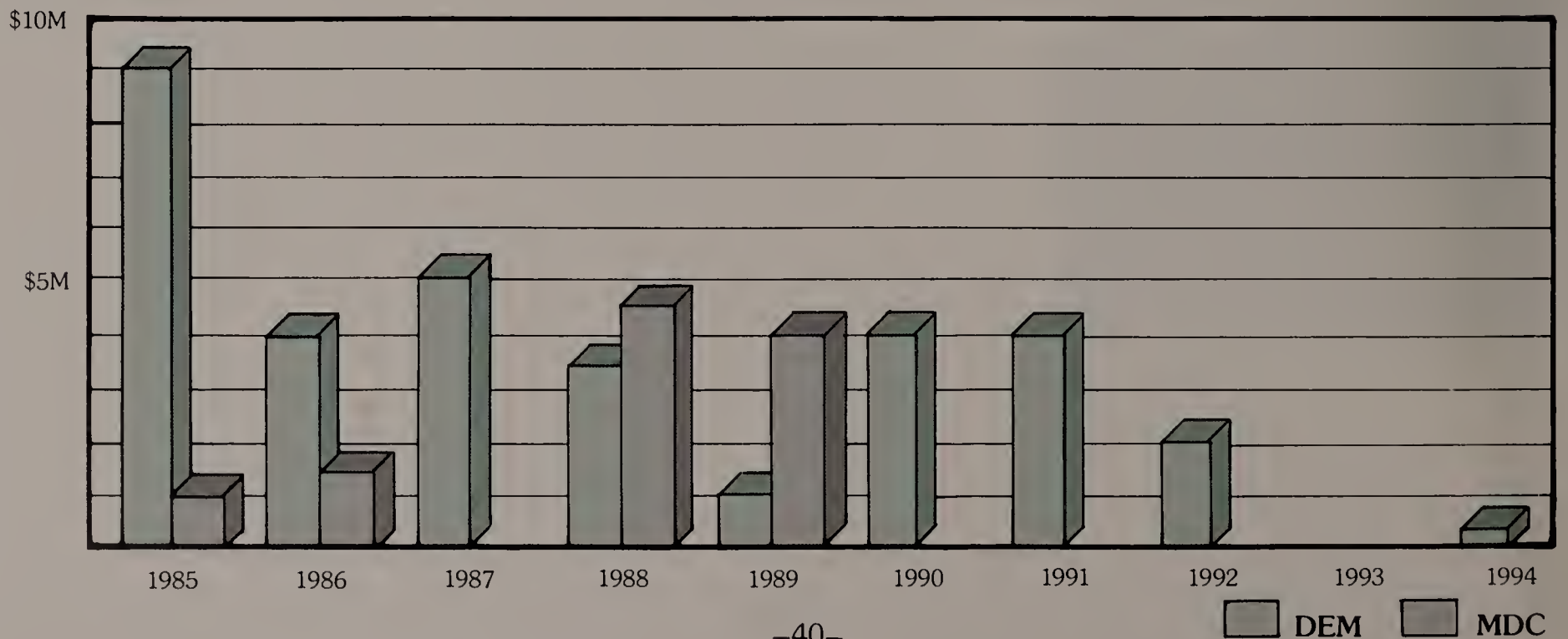
Weathered cliffs on Great Brewster

Phasing of Major Actions

The phasing of major actions over the next decade is based on several considerations: the priority of need to improve existing areas and to accommodate growth, the importance of early action to maintain momentum and public interest in the Harbor, the need to spread major capital expenditures over several years, and special relationships between projects such as the public works projects that are needed to provide the fill material for stabilization of Spectacle Island.

| Timing | Capital Cost (\$ Million) | Action |
|--------------|--------------------------------|---|
| 1986-1988 | N/A | Extend the visitor season into the Spring and Fall. |
| | N/A | Increase the number of island managers on all staffed islands. |
| | ? | Negotiate agreements with the City of Boston for acquisition or lease of Long Island, Rainsford Island, and city-owned portion of Spectacle Island. |
| | \$ 9.0 | Improve Long Wharf docking facilities and plan Boston Harbor Islands State Park Visitor Center at the head of the Wharf. |
| | \$ 1.9 | Make safety, pier, and seawall improvements at Georges Island, create new visitor center in Fort, and improve headquarters area. |
| | \$ 0.6 | Replace pier at Peddocks Island. |
| | \$ 7.6 | Improve and plan major facilities at Long Island, with direct ferry service. |
| | N/A | Develop marketing strategy and action plan to attract and serve urban residents, with emphasis on urban areas near the Harbor. |
| | N/A | Perform a scientific study of natural areas in the Harbor and design a long-term program for habitat improvements in low use areas to support plants and wildlife as they might have existed there before the 17th century. |
| | \$ 0.1 | Perform engineering studies to determine possible sources of drinking or irrigation water on the Islands; develop promising sources or provide transported drinking water. |
| | \$ 0.6 | Provide a prototype floating management base off Gallops Island as an alternative to structures on the Island, and make minor improvements on island. |
| | \$ 3.0 | Begin stabilization of Spectacle Island. |
| | 1989-1992 | \$ 1.3 |
| \$ 8.0 | | Restore Fort Warren on Georges Island. |
| \$ 2.0 | | Construct an additional pier and visitor/commuter facilities at Hewitts Cove headquarters, and provide direct water taxi to Bumpkin, Grape, and Peddocks Islands. |
| \$10.0 | | Begin park development of Spectacle Island. |
| 1993-1994 | N/A | Continue natural area improvements. |
| | N/A | Open Spectacle Island as a fourth major activity area. |
| | N/A | Provide expanded ferry and water taxi system, serving all active islands from Boston and Hewitts Cove, with additional service from Lynn Heritage State Park. |
| | N/A | Complete development projects; continue habitat improvements, restoration and management initiatives. |
| | \$ 0.2 | Study, plan, and develop swimming beaches as Harbor water quality improves. |
| Total | \$44.3 plus acquisition | |

Public Capital Investment



Management Recommendations

Habitat Improvement

One hundred years ago, Frederick Law Olmsted proposed a systematic program of reforestation for the Boston Harbor Islands; today, that proposal deserves new consideration. Management of habitat is an integral part of natural resource preservation and second only to acquisition in importance; however, the Harbor Islands are a special environment that requires a special approach to habitat management. This should begin with a scientifically based but management-oriented study of historical and current plant and wildlife communities on the Harbor Islands to determine what species are native to the Harbor and/or can thrive on the Islands and what steps should be taken to establish and manage these communities.

This recommendation recognizes the point of view that natural succession should be allowed to take its course without interference. While it may be appropriate to do this in some locations in the Harbor, human intervention in



Wetland on Thompson Island

the Harbor has extensively changed the Island environments and the re-establishment of viable plant and wildlife communities will be more successful if appropriate species diversity is created with human assistance.

Natural area management should begin at once but be done slowly and systematically over the long term by introducing seeds and small plants in a manner that will allow plants to adapt and become established in ecologically balanced communities.

Resource Protection

This applies to historic and archaeological resources as well as plant and animal communities. It is essential that all major and minor development of Park facilities be preceded by a study of plant specimens and habitat in the area to be affected, so that design and construction can avoid damage to these resources.

The same precautions are essential to protect archaeological resources, which are present on virtually all of the Harbor Islands. Massachusetts Historical Commission should be consulted prior to design development of any improvement. Where archaeological digs are planned, study sites must be protected from disturbance, but can be used as resources for interpretation with proper coordination. (This has been proposed for Long Island in the city's 1984 draft report, "Boston's Archaeological Legacy".)



Grove of oak trees on Rainsford Island



Calf Island

"Let anyone, passing through the harbor, imagine them clothed with foliage of any kind, and it will be felt how much more agreeable its character would be if they were generally wooded... The beauty to be gained... is the beauty of large compositions as these may be affected... by broad masses of foliage..."

The trees to be planted will be of the same kinds with those formerly growing on the ground. That they may help one another to overcome the difficulties of the situation they will, when planted, be small, pliant and adaptable..."

— Frederick Law Olmsted



Boston Harbor Islands State Park newsletter was distributed to ferry passengers in 1983, 1984, and 1985



Special programming

Interpretation, Programming, and Information

Visitor information should be provided at four levels that relate to the sequence of decisions that Park visitors must make: awareness of the Harbor Islands, how to get there, which island to visit, and what to do and see on that island. The visitor centers at Long Wharf and Hewitts Cove will be major sources of information and help to spread awareness of the tremendous potential of the Islands that lie just offshore. Island information centers with interpretive programs focussed on their locations should be provided at all the intensive use areas, and smaller facilities to support island manager interpretive efforts should be located on the moderate use islands. Fort Warren on Georges Island should house the principal historical resource center for the Park.

The effectiveness of these functions is crucial to the success of the Park as a whole, to visitor satisfaction, comfort, and safety, and to the marketing effort required to increase visitation to the levels assumed in this Plan. Effort should be focused on public information functions, with high quality interpretation and programming available but not forced on visitors who may prefer to find their own way around. As visitation increases, more people will be repeat visitors with more knowledge and sophistication about the Islands; program content should continue to interest and challenge these people.



Water Supply and Waste Disposal

These services are relatively difficult to provide on the Harbor Islands. For the moderate use islands, continuation of the current practice of transporting small quantities of drinking water to the Islands and providing pit and chemical toilets should be examined from the points of view of visitor convenience and environmental impact; alternative disposal technologies should be explored for the moderate use islands.

Exploration of groundwater potential is recommended for all Islands as a source of irrigation water and, possibly, drinking water. If wells do not prove to be feasible on all Islands, the transportation of larger quantities of drinking water should be considered.

For the intensive use areas, ample water supply and adequate waste disposal require focussed engineering studies. Georges, Peddocks, and Long Island have water piped from the mainland; Spectacle Island currently has no water supply and has no potential for groundwater development for drinking water; a subaqueous water line is probably required.

Sanitary disposal should be investigated for all four major use areas. Land disposal may be possible with adequate pretreatment, but composting or closed low water use toilet systems with pump-out and transportation of wastes may prove to be the most cost-effective option. Thompson's tertiary wastewater treatment is a notable example.

Outreach and Marketing

Public information and marketing to make more potential visitors aware of the Harbor Islands should be affirmatively directed to all of the residents of the communities surrounding the Harbor, particularly those who are under-represented among current visitors. DEM has already made substantial efforts through its group subsidy program and subsidized water taxi service. These efforts should continue but be supported by a more systematic study of the market area for the Boston Harbor Islands State Park; this study should examine economic, social, and access issues that may prevent many urban residents from using the Park, and it should develop a plan for increasing participation by all people for whom the Harbor Islands are a major recreational opportunity.

The results of this effort will be an increase in visitation by all types of potential park visitors and the achievement of a better balance among income, age, and cultural groups, reflecting the policy that access should be provided to all the residents of the Commonwealth as well as visitors to it. Possible methods to increase visitation include the year-round staffing of the planned Long Wharf Visitor Center, public information through the media, outreach by DEM representatives to encourage and help groups to visit the Park, hiring island managers from segments of the population targeted for greater participation (e.g., elders and minorities); and continued, targeted follow-up surveys to determine what visitors reached through the program did and did not enjoy on their trip to the Park.

Public/Private Coordination

The Boston Harbor Islands serve many constituencies by providing a unique amenity to the region. As discussed in the last section of this report, this Plan is a turning point in the Park's development, and there is a special need for leadership within the private sector to mobilize support for the implementation of this Plan. to advise DEM, and to sponsor "superprograms" and special events within the Park.

The continued participation of existing private groups is also essential, particularly the Friends of the Harbor Islands, a volunteer organization that has made a great contribution to public awareness, information, management and maintenance of the Islands; the Peddocks Island Trust, Inc. which is presently responsible for management of that Island and is currently involved in discussions with the MDC to increase its role under a long-term lease; and the Thompson Island Educational Center, which owns and operates that Island.



Volunteer from Friends of the Harbor Islands





Staffing and Maintenance

Personnel and materials to accomplish present management responsibilities must be provided if the Park is to function adequately and safely. The Boston Harbor Islands State Park is by its nature more expensive to operate than other parks because of the difficulty of working on islands, but the special qualities and benefits of the Park make this expenditure worthwhile. As the proposed Park improvements take place, operating budgets will also need to increase, but costs per visitor can be expected to decrease.

In its next phase of development, DEM management should be expanded to include assistant supervisors based at Long Island and Long Wharf visitor center as well as at Hewitts Cove. The Long Island manager should be assisted by three year-round and five seasonal workers, all based on the Island with necessary equipment to minimize travel time. At Long Wharf, the manager should be assisted by four year-round and two seasonal workers. Hewitts Cove should remain the overall headquarters, with two assistant supervisors, four year-round and 15 seasonal workers, plus the seasonal Island Managers. When Spectacle Island is opened, additional staff must be added. DEM and MDC staff are currently helped by the Friends of the Harbor Islands Volunteer Corps, and their continued participation should be encouraged.



Resident staffing on moderate use islands should immediately be increased to three on weekends and two on weekdays during the season, by adding a maintenance worker to each island. This arrangement will provide better security for both staff and visitors and better maintenance of the islands, and will allow one of the two island managers to devote full time to interpretive and informational roles. Increased staffing would also permit island managers to spend paid time off-island developing programs and interpretive materials; a staff resource center at Hewitts Cove will support this role. An effort should be made to rehire managers from previous seasons to improve continuity and training of new managers. The successful DEM/MDC Island Manager training program should be continued, with joint coordination by the two agencies.

Increased operating resources will also allow the Park staff to spend an adequate amount of time and materials on systematic preventative maintenance of piers, structures, and seawalls, a more cost-effective approach than replacement after damage or deterioration becomes irreversible. Research should be done on preferred engineering techniques to reduce maintenance.



Island Managers live and work on their assigned island throughout the summer.

Interagency Coordination

The Executive Office of Environmental Affairs will continue to coordinate the activities of the Department of Environmental Management and the Metropolitan District Commission, both to make the best use of scarce resources and to provide uniform policies and rules and a coherent Park image for visitors. Good coordination should be maintained both vertically within each agency, and horizontally between them.

Training of Island Managers to staff both DEM and MDC Islands through a single program is an example of successful coordination between the agencies. Police coverage, radio communication, and fire protection are the next priority areas for improvement.

No less important is the coordination between the State, on the one hand, and the affected local governments, on the other. A strong partnership with the City of Boston, which currently owns and maintains Long Island, will be promoted by the Executive Office of Environmental Affairs.

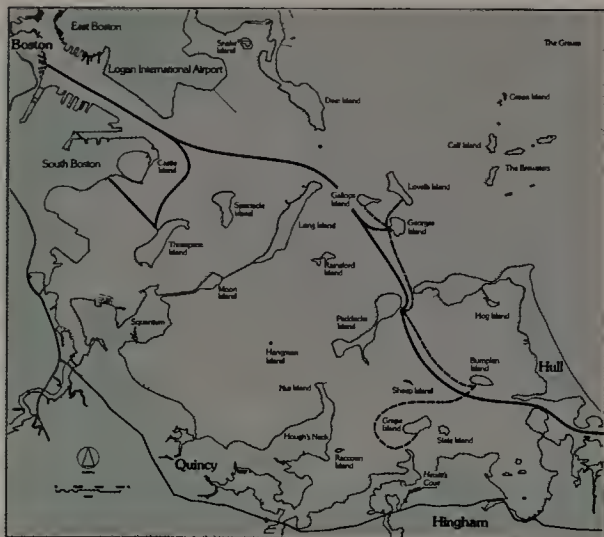


Gallops Island, 1983



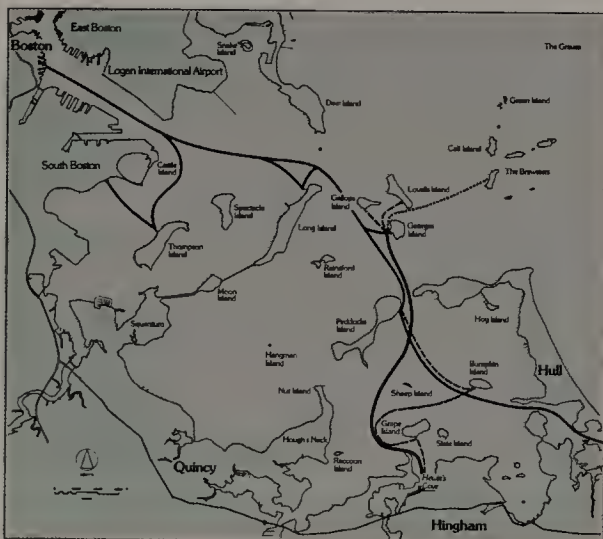
Governor Dukakis, Richard Delaney, Director of CZM, Commissioner Gutensohn, DEM, Commissioner Geary, MDC, and Captain Albert Swanson, MDC, enroute to the islands.

Transportation System Recommendations



Existing Service

- Ferry
- DEM Water Taxi



Short Term Improved Service

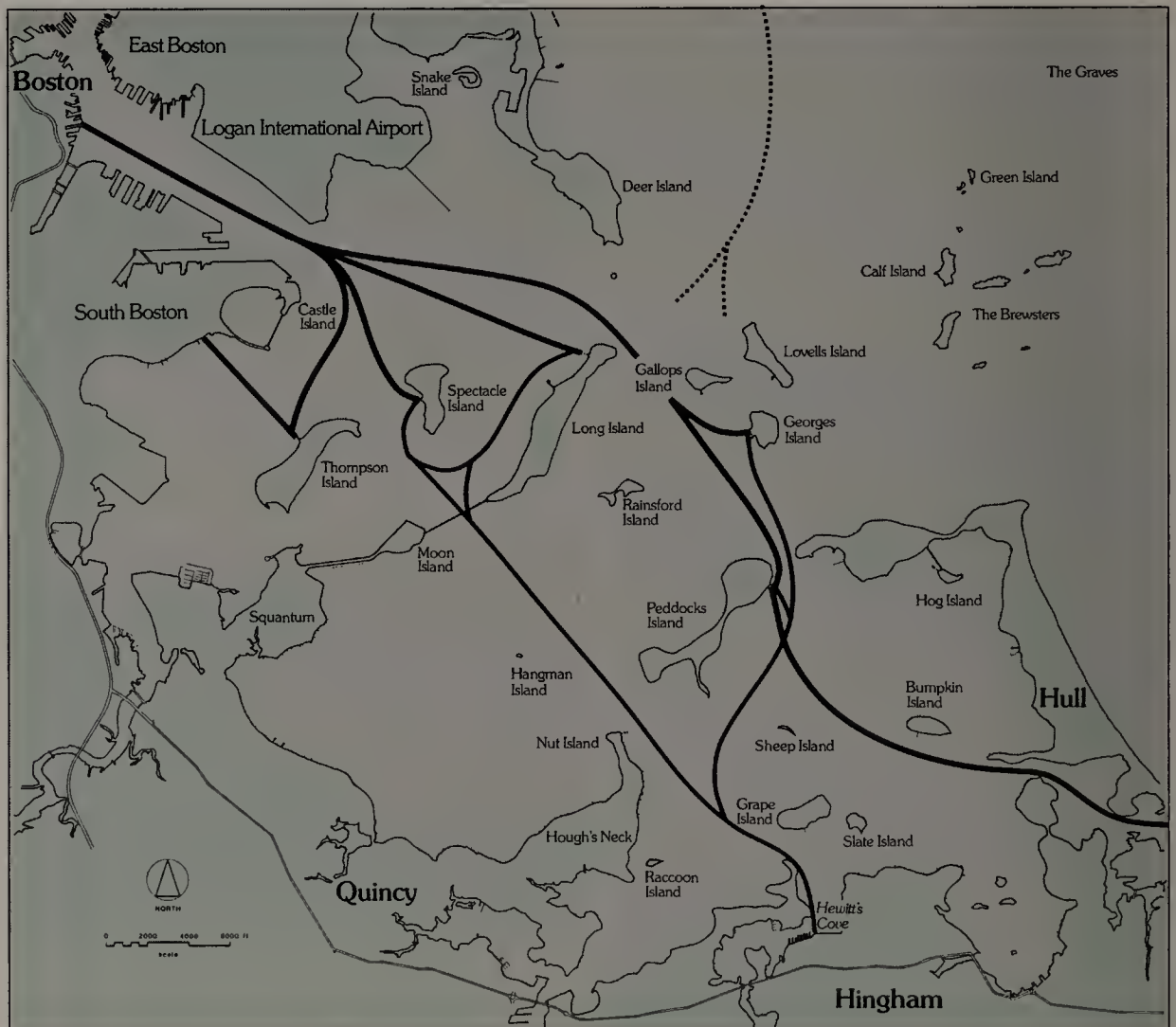
- Ferry
- DEM Water Taxi
- Infrequent Service

Ferry Service

The trip to the Islands is one of the most memorable and enjoyable parts of the Island experience to most visitors. Service to the Boston Harbor Islands State Park is currently provided by private operators using boats of various sizes in the 150 to 600 passenger range. There are three schedules operating from Long Wharf or Rowes Wharf in downtown Boston to the present Park terminal on Georges Island; adult ticket prices are \$3 to \$4, depending on the operator. Peddocks Island is served by the Long Wharf to Nantasket ferry; the \$6 ticket for this service includes a \$2 fee for the Peddocks Island Trust. Group rates are also available, and DEM provides subsidies to eligible organizations.

The first change in ferry service will be ferry service to Long Island Head; this can be provided by modifying existing schedules to Georges Island to add the

additional stop en route. When the Plan is fully implemented, separate ferry schedules will be necessary for each of the four intensive use islands (Georges, Long, Peddocks, and Spectacle), and service will be provided both from Long and Rowes Wharves in Boston and from Hewitts Cove in Hingham; a total of seven separate schedules (four from Boston and three from Hingham) will be involved. As visitation at both Boston Harbor Islands State Park and the Lynn Heritage State Park increase, an additional north shore ferry link can be added. The fleets serving the Harbor Islands will be cross-utilized for excursions, charters, and commuter service; approximately 12 boats of 400-passenger capacity will be required, as compared to five at present. Additional docking and support space will be needed both in Boston and at Hewitts Cove, and a greater public role will be needed to coordinate service.



Future Ferry Service

- Boston Ferries
- Hingham Ferries
- Lynn Ferry

Water Taxi

The Boston Harbor Islands State Park is currently served by two water taxis of 45 passenger capacity, operated under contract to DEM; there is no charge to water taxi riders. Taxis operate from the pier at Georges Island on schedules to Gallops, Lovells, and the Hingham Bay Islands (Peddocks, Grape, and Bumpkin).

Upon full implementation of this Plan, two levels of water taxi service will be provided. The first level will be by two large vessels of perhaps 250-passenger capacity travelling a circuit among the four major Island centers and doubling as ferries at the beginning and end of the day. This loop will help to tie the Park together, give visitors more flexibility, and serve as a primary attraction in its own right as a tour boat for the Park as a whole.

The second level of water taxi service will consist of two subsystems, one serving Gallops and Lovells Islands from Georges Island, the other serving Peddocks, Bumpkin, and Grape, from Hewitts Cove. The volume of scheduled service in these two subsystems will be comparable to that of today, except that minor increases are planned to provide moderate increases in visitor levels to Bumpkin, Grape, and Lovells.

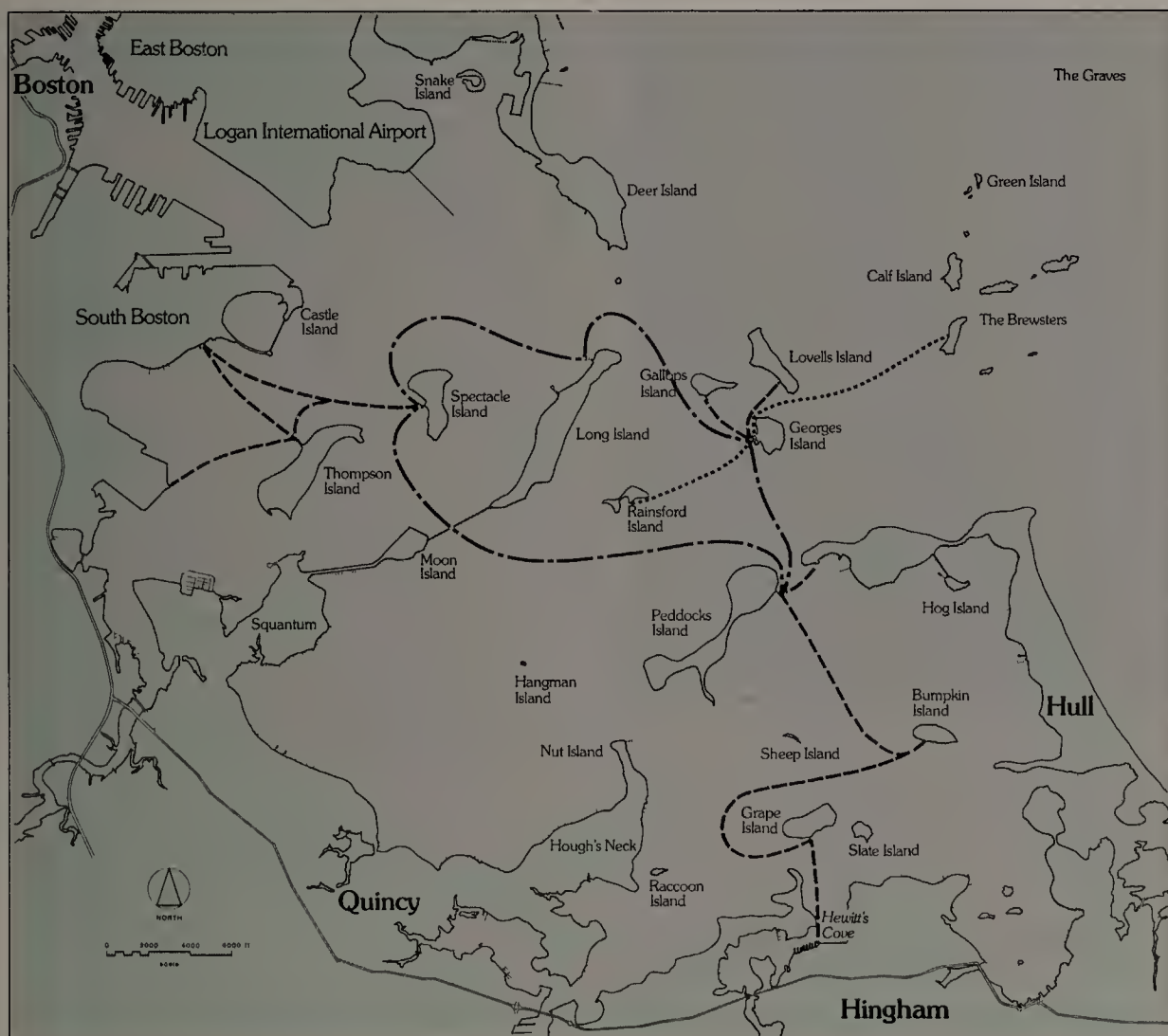
Initially, it is recommended that there be no separate charge for water taxi service to avoid discouraging visitors from using it; a moderate increase in ferry ticket prices would help to pay the cost of the water taxi service. As visitation to the Harbor Islands increases, it may be desirable to charge a moderate fare (perhaps 50 cents) for the taxi service, with appropriate programs to provide free tickets for low income visitors as is

done now under the DEM program to make ferry service available to these groups. In either case, boarding passes or tickets should be made available to regulate peak period use of the Islands served by the taxis and to make loading more orderly.

The Transportation Element of the Master Plan contains recommendations for management and coordination of the transportation system serving the Park.



DEM water taxi



Future Water Taxi Routes

- Small Vessel
- .-.-.- Large Vessel
- Infrequent Service

Making it Happen

Any plan is only as good as its results. To make this vision of the Boston Harbor Islands State Park a reality will require the effort and cooperation of the General Court, the Governor and his administration, public and private groups, and individuals like you, the reader of this report.

The Boston Harbor Islands are much more than a recreational opportunity. They are a unique amenity with the potential to change for the better the way people think about Boston, its neighboring communities, and the Commonwealth as places to live and to do business. This would have enormous economic and social benefits for every person living or working in Massachusetts. The Harbor's potential has already been publicly recognized by the City of Boston and the state administration.

A Challenge to the Private Sector

Governor Dukakis has taken the lead in cleaning up Boston Harbor and in realizing the potential of its islands. Commitment and leadership toward these goals is very strong in the legislature, which must raise the capital to improve the Park and provide its operating budget. But state and local public officials cannot do the job without focussed and widespread support from the private sector.

What is needed to realize the Plan is adept and aggressive participation by leaders from business, institutions, and public interest groups in the Commonwealth. An organized group of such individuals can be instrumental in accomplishing the four basic tasks

needed to reap the full benefits of the Boston Harbor Islands State Park:

1. To help complete the inclusion of the remaining Harbor Islands in the Park through acquisition or long-term leasing;
2. To mobilize support for the funding of improvements proposed in this Plan, through new capital outlays over the next ten years and adequate support of operating budgets;
3. To ensure that the Park's development is done right, by advising and working with public officials to safeguard environmental values and to see that the benefits of the Park are shared by all; and
4. To increase participation in the enjoyment of the Park, by sponsoring special events and "superprograms" and by publicizing the special amenity that lies just offshore.

In the next decade, Boston Harbor's waterfront and islands will become as widely known as New York's skyline and San Francisco's Golden Gate and as much a part of the spirit of Massachusetts as Heritage Parks, Cape Cod, and the Berkshire hills.



The Boston Harbor Island 1986 Master Plan was prepared for the Massachusetts Department of Environmental Management.

Michael S. Dukakis,
Governor

James S. Hoyte,
Secretary of Environmental Affairs

James Gutensohn,
Commissioner, Department of Environmental Management.

The Plan was prepared under the direction of the following staff members of the Department of Environmental Management:

Robert Kumor, Deputy Commissioner of Planning and Development

Robert Yaro, former Deputy Commissioner of Planning and Development

Christopher Greene, Chief Planner

Katherine F. Abbott, Project Manager

The participation and coordination of the following agencies and individuals is gratefully acknowledged:

Massachusetts Metropolitan District Commission

William J. Geary, Commissioner

Julia O'Brien

Gary Van Wort

Mark Primack

Massachusetts Coastal Zone Management Office

The staff and island managers of the DEM Division of Forests and Parks and Boston Harbor Islands State Park,
Brian Shanahan, Park Supervisor

The Friends of the Boston Harbor Islands

The Peddocks Island Trust, Inc.

Thompson Island Education Center, Inc.

All those individuals who attended public meetings on the plan and who offered their comments.



The Plan was prepared by:
Wallace, Floyd, Associates Inc.
Architects/Planners
James Purdy, Project Manager

Albert Veri Associates Inc.
Landscape Architects

Cambridge Systematics Inc.
Transportation Planners

BSC Engineering
Engineers

Urban Consulting Associates of Boston Inc.
Marketing Consultants

This report was prepared by
Wallace, Floyd, Associates Inc.
Joan Driebeek, Designer
Todd Clark
Brian LaBau
Dan Heist

Typesetting by
Litho Composition Company

Printing by
Artco Offset, Inc.

Photo Credits

Photo position on page is indicated as top (T), middle (M), bottom (B), left (L), right (R).

Bostonian Society: 15B

Gerald Butler: 27RB

Mitch Hanson: 8T, 41L, 42M, 48

BSC Engineering, Inc.: 20B and historic map of Boston Harbor

Tom Lepisto: 5L

Massachusetts Department of Environmental Management: 5T, 6B, 7L, 10T, 11T, 27, 29RM, 30LT, 30LB, 32B, 38M, 38R, 39T, 44BL

Alex S. MacLean, Landslides, Inc.: 24-25

Cymie Payne: 1, 3, 6T, 6M, 7T, 7R, 10B, 12, 13, 14, 15M, 32LT, 32LB, 42T, 42B, 43R, 44TL, 44ML, 47

Peddocks Island Trust, Inc.: 38L

Jim Purdy, WFA: Cover, 7B, 16B, 19T, 19B, 20T, 23, 29L, 29RT, 29RB, 30R, 32R, 34, 41RT, 41RB, 44BR, 45

Carole Schlessinger, WFA: 2, 27RT, 27LT, 27LB

Al Shea (courtesy of Boston Department of Environment): 4, 11B, 15T, 16T, 36T, 39B

Al Veri: 18, 19M

The environmental artwork proposed for Spectacle Island was developed for the National Endowment for the Arts by Keiko Prince and is copyright 1984 by the artist.

